

THE GANDAKI AND  
THE GHAGRI

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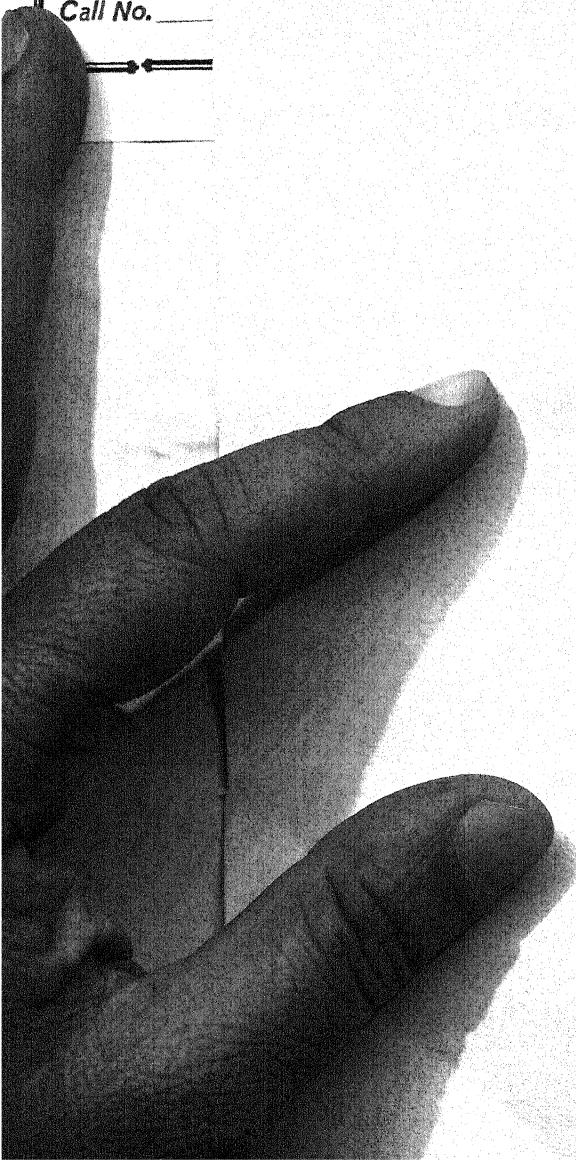
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# THE GANDAKI

## INTRODUCTION

With the publication for the first time in its entirety of Dr. Buchanan's report for the district of Bhagalpur which he surveyed in 1810-11, the Bihar and Orissa Research Society brings to a successful close an endeavour initiated in 1916. On the recommendation of the Directors of the East Indian Company in 1807 to the Governor-General for a statistical survey of the presidency of Bengal, Dr. Francis Buchanan who had been employed in the survey of Mysore was directed by the Governor-General in Council on the 11th September of the same year to do the work. All the districts then forming part of the Presidency of Bengal were surveyed by Dr. Buchanan during the years 1807-14. The results of this survey were transmitted to England in 1816 and in 1838 appeared in an abridged form in the three volumes of "Eastern India" by Mr. Montgomery Martin with Martin's name alone on the title-page.

The defects of Montgomery Martin's abridgement of the Reports have been pointed out by Sir W. W. Hunter, Beveridge, Jackson, Oldham and James and readers may be referred to the Introduction to Jackson's edition of the Journal (1923), and James's edition of the Report (1936) for the districts of Patna and Gaya. The abiding value of the topographical and antiquarian information in Buchanan's survey can be properly appreciated if his Journals and Reports are studied as a whole as prepared by him. At the instance of the late Mr. V. H. Jackson, and owing to the interest taken in the matter, specially by Sir Edward Gait, Messrs. Oldham and McPherson, a proposal to publish the Journals through the agency of the Bihar and Orissa Research Society was sanctioned by the Secretary of State in 1916--just a hundred years after their actual compilation and submission to the authorities in England. The first volume of the series, Buchanan's Patna-Gaya Journal edited by Jackson, was published in 1923. To the Journals were added the Reports. The Journals published so far are—Bhagalpur (1810-11) Patna Gaya (1811-12), Shahabad (1812-13); unfortunately no Ms. of the Purnea Journal is available. The reports are for the districts of Purnea (1809-10), Bhagalpur (1810-11), Bihar and Patna (1811-12) and Shahabad (1912-13). These three Journals and four Reports complete all available matter regarding the Bihar districts in the original statistical survey of Bengal by Buchanan. The mutilated and garbled version of Martin appeared in 1838 containing an uncritical abridgement of the Reports. The Bihar and Orissa Research Society completes with the publication of the present volume its series reproducing the original Buchanan MSS. in 1938. During these hundred years, Dr. Buchanan's great survey remains a mine of information and a model for subsequent compilers of "statistical accounts" and gazetteers, and his amazing industry an inspiration for all.

It may be interesting to recall that the Report on Dinajpur was made over by Mr. G. Swinton, who was then Chief

Secretary, to Captain Herbert, the editor of *Gleanings in Science* in 1831, and was published at Calcutta in 1833. James Prinsep, the first editor of the successor of *Gleanings*—the *Journal of the Asiatic Society of Bengal*—in the preface to Volume II announced with regret that the publication of the remaining Reports would have to be discontinued owing to lack of support. The Bihar and Orissa Research Society has been more fortunate in securing enlightened support. The publication of the Patna-Gaya Report edited by the Hon'ble Mr. Justice F. W. James was financed by the Maharaja of Hatwa. The entire cost of publishing the Shahabad and Bhagalpur Reports has been borne by one of our generous Vice-Patrons, Rai Bahadur Radha Krishna Jalan, through the kind interest of Mr. G. E. Fawcett, C. I. E. at present President of the Joint Public Service Commission for Bihar, Orissa and the Central Provinces and Berar.

The history of the Buchanan MSS., the bearing of the records in his daily journal on the subsequent writing of his Report, Buchanan's use of but dissatisfaction with the second edition of Rennell's Bengal Atlas, published in 1781, a probable plan which he formed to prepare a revised edition of the maps in the Bengal Atlas itself, so far as they related to his Survey, Buchanan's scale of ten geographical or nautical miles to an inch corresponding to Rennell's, Buchanan's actually approximating to 11·8 and 11·6 miles to an inch (slightly different from Rennell's calculation of 11·53 statute or British miles to an inch), Buchanan's care and thoroughness with which he tested the truth of any statements made to him and his adoption of the principles of modern scientific research—all these have been discussed by Jakson in his admirable introduction to his edition of the Patna-Gaya Journal. His remarks apply to this Report also—its vast mass of topographical, archaeological, zoological, botanical, geological, economic and historical information. The directions from the Governor-General in Council, issued on the 11th of September 1807 are reproduced in the introduction to the Hon'ble Mr. Justice James's edition of the Patna-Gaya Report and are reprinted here for ready reference.

"Your inquiries are to extend throughout the whole of the territories subject to the immediate authority of the Presidency of Fort William.

"The Governor General in Council is of opinion that these inquiries should commence in the district of Rungpur, and that from thence you should proceed to the westward through each district on the north side of the Ganges, until you reach the western boundary of the Honourable Company's provinces. You will then proceed towards the south and east, until you have examined all the districts on the south side of the great river, and afterwards proceed to Dacca, and the other district towards the eastern frontier,

"It is also desirable, that you should extend your inquiries to the adjacent countries, and to those petty states with which the British Government has no regular intercourse. In performing this duty, however, you are prohibited from quitting the Company's territories, and are directed to confine your inquiries to consulting such of the natives of those countries as you may meet with, or natives of the British territories who have visited the countries in question.

"Your inquiries should be particularly directed to the following subject, which you are to examine with as much accuracy as local circumstances will admit.

"I. A *Topographical* account of each district, including the extent, soil, plains, mountains, rivers, harbours, towns, and subdivisions; together with an account of the air and weather, and whatever you may discover worthy of remark concerning the history and antiquities of the country.

"II. *The Condition of the Inhabitants*; their number, the state of their food, clothing, and habitations; the peculiar diseases to which they are liable; together with the means that have been taken or may be proposed to remove them; the education of youth; and the provision or resources for the indigent.

"III. *Religion*; the number, progress, and most remarkable customs of each different sect or tribe of which the population consists; together with the emoluments and dower which their priests and chiefs enjoy; and what circumstances exist or may probably arise that might attach them to Government, or render them disaffected.

"IV. *The Natural Productions of the Country*, animal, vegetable, and mineral; especially such are made use of in diet, in medicine, in commerce, or in arts and manufactures. The following works deserve your particular attention:

1st. The *fisheries*, their extent, the manner in which they are conducted, and the obstacles that appear to exist against their improvement and extension.

2nd. The *forests*, of which you will endeavour to ascertain the extent, and situation, with respect to water conveyance. You will investigate the kinds of trees which they contain, together with their comparative value, and you will point out such means, as occur to you, for increasing the number of the more valuable kinds, or for introducing new ones that may be still more useful.

3rd. The *mines and quarries* are object of particular concern. You will investigate their produce, the manner of working them, and the state of the people employed.

"V. *Agriculture*, under which head your inquiries are to be directed to the following points.

1st. The different kinds of *vegetables* cultivated, whether for food, forage, medicine, or intoxication, or as raw materials for the arts ; the modes of cultivation adopted for each kind ; the seasons when they are sown and reaped ; the value of the produce of a given extent of land cultivated with each kind ; the profits arising to the cultivator from each, and the manner in which each is prepared and fitted for market. Should it appear that any new object of cultivation could be introduced with advantage, you will suggest the means by which its introduction may be encouraged.

"2nd. The *implements of husbandry* employed, with the defects and advantages of each, and suggestions for the introduction of new ones, that may be more effectual.

3rd. The manure employed for the soil, especially the means used for irrigation.

"4th. The means used for excluding floods and inundations, with such remarks as may occur to you on the defects in their management, and the remedies that might be employed.

5th. The different breeds of the *cattle, poultry, and other domestic animals* reared by the natives. The manner in which they are bred and kept; the profits derived from rearing and maintaining them; the kinds used in labour; whether the produce of the country be sufficient, without importation, to answer the demand, or to enable the farmer to export; and whether any kinds not now reared might be advantageously introduced.

"6th. *Fences*, the various kinds that are used, or that might be introduced, with observations concerning the utility of this part of agriculture in the present state of the country.

7th. The state of *farms*; their usual size, the stock required with the manner in which it is procured; the expense of management; the rent, whether paid in specie or in kind; the wages and condition of farming servants and labourers employed in husbandry; tenures by which farms are held, with their comparative advantages, and the means which, in your opinion, may be employed to extend and improve the cultivation of the country.

"8th. The state of the *landed property*, and of the *tenures* by which it is held, in so far as these seem to affect agriculture.

"VI. The progress made by the natives in the *fine arts* in the *common arts*, and the state of the *manufactures*; you will describe their architecture, sculptures, and paintings, and inquire into the different processes and machinery used by their

workmen, and procure an account of the various kinds and amount of goods manufactured in each district. It should also be an object of your attention to ascertain the ability of the country to produce the raw materials used in them ; and what proportion, if any, is necessary to be imported from other countries, and under what advantages or disadvantages such importation now is, or might be made ; you will also ascertain how the necessary capital is procured, the situation of the artists and manufactures, the mode of providing their goods, the usual rate of their labour ; any particular advantages they may enjoy ; their comparative affluence with respect to the cultivators of the land, their domestic usages, the nature of their sales, and the regulations respecting their markets. Should it appear to you that any new art or manufacture might be introduced with advantage into any district, you are to point out in what manner you think it may be accomplished.

VII. *Commerce*; the quantity of goods exported and imported in each district ; the manner of conducting sales, especially at fairs and markets ; the regulation of money, weights, and measures; the nature of the conveyance of goods by land and water, and the means by which this may be facilitated, especially by making or repairing roads.

"In addition to the foregoing objects of inquiry, you will take every opportunity of forwarding to the Company's Botanical Garden at this presidency, whatever useful or rare and curious plants and seeds you may be enabled to acquire in the progress of your researches, with such observations as may be necessary for their culture."

An account of the author himself, of his life and work will be found in Sir David Prain's Memoirs published in Calcutta in 1905 : "A sketch of the life of Francis Hamilton (once Buchanan) sometime Superintendent of the Honourable Company's Botanic Garden, Culcutta."

I started work on the Bhagalpur Report with a comparison of a type script of the original manuscript left by Jackson with Montgomery Martin's edition. It soon became clear to me that the type script was quite unreliable. Whole pages were often missing probably due to Mr. Jackson's sudden death and the subsequent mislaying of his papers. We were feeling a little despondent as on a reference to the original MSS. in the India Office Library, the type script was found to be even more corrupt than we had thought. The unfailing kindness and ungrudging help of Mr. C. E. A. Oldham, C. S. I., once more came to our rescue. Under his supervision, a fresh typed copy of the omissions, and of the corrections required was made by Miss Anstey in her usual efficient way for which she deserves the Society's best thanks.

In the actual task of preparing the complete text by inserting these transcriptions of the portions omitted into the text of Martin's " Eastern India ", and then in seeing the volume through the press and correcting its proofs, I have received valuable help from Dr. K. K. Dutt and Mr. J. N. Sarkar of the department of History in Patna College. To these two scholars I am indebted for their industry and co-operation.

I am preparing for this volume a detailed Index on the lines of my Purnea Report Index.

As mentioned above, the Society is thankful to Rai Bahadur Radha Krishna Jalan for allowing this report to be printed free of charge at his Patna Law Press.

A. BANERJI-SASTRI.

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\* This table of contents is not given by Buchanan but has been prepared  
for the convenience of readers,

Aurangabad—Division under Thanah  
 Kalikapur—Division under Thanah  
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 dewani—Territory belonging to the Mountaineers—Territory of the Northern tribe of  
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**BOOK I.**  
TOPOGRAPHY AND ANTIQUITIES.

CHAPTER 1ST

EXTENT, GENERAL APPEARANCE, AND SOIL.

*SECTION 1st.*

*Extent and Boundaries.*

This district forms the jurisdiction of a Judge and Magistrate; and not only includes the whole extent, which is under the management of the Collector residing at its capital, but also part of the lands of which the Collectors of Murshedabad and Puraniya receive the income. This is attended with some inconvenience, both in the administration of justice, and collection of revenue; for the judge must have occasional need to consult the records of the collector, and the latter officer has also sometimes occasion to apply for the assistance of the magistrate, and while they reside at a distance, these applications must be attended with considerable delay, and additional trouble.

This district occupies the S. E. corner of the Mogul province of Behar, together with a small portion of Bengal; but would appear at one time to have been

entirely included within the Muhammedan kingdom of the latter name. Its greatest length, from the boundary of Virbhumi on the Dwarka to that of Tirahut on the Tilawee, is about 133 miles in a N. N. W. and S. S. E. direction ; and its greatest breadth, crossing the above line at right angles, from Rajmahal to the boundary of Virbhumi near Chandan, is about 80 miles. According to Major Rennell its southern extremity, at Chandrapur on the Dwarka river, is in  $24^{\circ} 4' N$  ; and its northern extremity, on the Tilawee, extends to  $25^{\circ} 49' N$ . Its eastern extremity on the Ganges near Gaur is  $15^{\circ} W$  from the meridian of Calcutta ; and on the hills of Gidhaur it extends about  $2^{\circ}$  West.

By tracing the boundaries, so far as could ascertain them on the Map of Major Rennell, I find that it contains about 8224 square British miles ; but I have to regret much, that the extent cannot in this manner be ascertained with much precision ; for in the whole district there are very few boundaries that are tolerably well defined. Every proprietor of land alleges, that his boundary extends farther than his neighbour in that direction will allow ; and as the whole boundaries of the jurisdiction have been fixed by the extent of certain properties, and not by any great lines marked by nature, the whole outline of the district is uncertain, except where decisions of the courts of law have determined the disputed parts. Even where that has happened, in no case, I believe, have the zemindars desisted from their claims, and it was their agents who pointed out the boundary, that I have adopted. It may be therefore expected that I have extended too far the boundaries towards Virbhumi, Tirahut, Behar, Murshabad and Ramgar, as I had with me none of the people of these districts to mention their claims. Towards Purniya I have heard both parties.

The turbulent state of the inhabitants, and the difficulty of access into the country, when Major Rennell made his survey, opposed obstacles which have rendered his map of this district less valuable than most parts of his excellent work, and I have to regret that the copy of a more recent survey, which had been deposited in the office of the Collector, has been lost. Owing to these circumstances, to the very uncommon manner in which

many of the subordinate jurisdictions have been intermixed, not only with each other, but with other districts, and to the disputed and undetermined nature of the boundaries, I have not been able to trace these in a manner that can be at all satisfactory, and in almost every case I have been under the necessity of proceeding by conjecture, and that in many cases of a very vague nature.

In calculating the proportion of various kinds of land and the extent of cultivation, as given in the 1st statistical Table, I found the proprietors so evidently departing from the truth that I have in a great measure been obliged to trust entirely to what I and my native assistants could actually observe, on which account we traversed the district in many directions and with much pains. Notwithstanding this labour, I am much less satisfied with the result than with those which I procured in the districts formerly surveyed. The conduct of my inquiries, owing to this circumstance, has in this district been rather disagreeable. The managers of the estates showed much alarm, a want of veracity that could only be equalled by their total indifference about its being discovered, and a degree of intellect vastly inferior to the people of Bengal. No general statements could be procured from the most intelligent, and the details which they gave were in such diametrical opposition according to the nature of the questions proposed, that no reliance whatever could be placed on their assertions. If for instance a man was asked, why so much land was waste, he would assert that  $\frac{7}{8}$  of his estate were cultivated; but in explaining the heaviness of his burthens he would show an account in which, with an extent of 10 or 12 miles square, he had not above one or two thousand bigahs in cultivation.

The form of this district is tolerably compact, except that towards the East it is most miserably intermixed with Puraniya, Dinajpur, Nator, Murschedabad and Vibhumi, that the capital is situated towards one of its extremities, and that the whole, which is beyond the capital towards the north, is separated from it by the Ganges, which is attended with much inconvenience and danger, I am persuaded, that by uniting all the parts beyond the Ganges, to Tirahut and by placing the remainder,

Virbhumi, and part of Ramgar under the care of one Judge and one Collector, whose jurisdictions should be commensurate, not only the saving of a Zila establishment might be made; but that by this measure, were the capital removed to Deoghar, some degree of improvement might be introduced among the inhabitants of both districts, as well in their manners as in a knowledge of the arts.

The subdivisions for the purpose of police and the administration of justice have been made with a want of care and knowledge that is altogether astonishing. Their boundaries, as I have already said, are totally undefined; their sizes and population are of vast disparity, and their jurisdictions are intermixed in a manner that is altogether ridiculous. Their number in some parts is totally superfluous, while in others they are placed at such remote distances as to be quite out of reach. A very large proportion of the district is not under the superintendence of the ordinary officers, but is placed under the charge of a Suzawul to whom has been entrusted the care of the police among two tribes of mountaineers.

#### *SECTION 2nd*

##### *Soil.*

In this there is a very great variety, but on the whole the parts of it that are fit for the plough seem uncommonly rich, and want only pains to become highly productive. Complaints of its being of a contrary nature are indeed very universal among the natives; and in all statements which they make, vast quantities are said to be (Karara) entirely barren, or (Gang shekust) destroyed by rivers. But this seems to be merely an excuse for the wretched condition to which the country has been reduced. Practical knowledge, it is true, is the only certain guide; and it may be supposed, that the experience of the natives should command a decided preference over the opinion of a traveller, judging merely from appearances. This I am willing to admit to a considerable extent; and were the farmers men of skill, and were the Zemindars and their agents uninterested, and willing to speak the truth, I should never oppose my opinion to deductions from their experience; or rather I would not form opinions contrary to what such a guide had established; but such are the

want of skill and veracity among the people from whom I obtained information, that little reliance, I think, can be placed on what they asserted. In almost every part of the district the attention of the farmer is confined chiefly to some one description of cultivation, and every other is much neglected; all the land, that is unfit for the kind of cultivation in fashion is therefore reported as barren; but to one travelling through the district it becomes evident, that in one place a certain soil is considered as totally useless, while in other places soil of exactly a similar appearance and similarly situated is the only one that is thought fit for cultivation. So far [it] is to be attributed merely to a want of skill in the farmer, but the landlords allege that much land of now waste is totally unfit for cultivation, although lands apparently the same nature, and in the immediate vicinity, are cultivated and very productive. This I have no doubt is done with a view to conceal the practices which occasion the lands to be in that condition; and these practices are their neglect of improvement, and rapacity.

In this district a very considerable extent is occupied by mere rock, totally incapable of cultivation, and this is the case not only on the hills but in a few places on the plains.

A much greater extent is covered with fragments of rock of various sizes. On the hills these fragments are so large and numerous, that, could the plough be used on account of the declivity, the nature of the soil would render its use impracticable: yet in many parts such a soil is very far from being barren, and such alone is the land cultivated by the mountaineers of Rajmahal. In their fields fully a half seems to consist of angular masses of rock, from 6 inches usually to 1 foot in diameter, and yet their crops of cotton and Arahār equal any that I have seen on the plains. I had no opportunity of seeing their crops of corn, but so far as I could learn, these are by no means scanty. On the plains ground so filled with stones might, no doubt, be cultivated by the same process, but in all cases it might be more advantageously employed for planting the trees, on which the Tasar silk and Lac are reared. Most of such land is found among or near the hills, and is so much intersected with ravines and

water courses, as to be unfit for the plough, were the stones to admit of that implement being used.

There is also a considerable extent of land, in which, mixed with a good soil, there are many small fragments of stone, of a size that does not impede the plough. In some parts these are considered as rendering the soil useless; but I observed in others, that such land as contained these small stones, was preferred for crops raised during the rainy season, and I also observed that the crops had been good. It is indeed known to all farmers of observation that these stones preserve the soil cool and moist, and encourage vegetation.

The extent of poor, sandy or gravelly soil is vastly smaller than in Puraniya. Near the banks of the Ganges some land is overwhelmed with sand deposited from the inundations, and is called Balubord. It is considered as totally useless, at least in the western parts, and there the indigo planters have not discovered the advantage of sowing their plant on such land. Very light sandy soil, near the Ganges but still capable of cultivation, in the Hindi dialect is called Balukushi, Usari or Phulongk. In the dialect of Bengal it is here most commonly called Chama.

Near some smaller rivers, which inundate their banks, is some very poor land called also Usari, which has a thin soil over a sharp dry sand. This land is too deeply inundated to yield anything during the rainy season, and, during the dry, is too suddenly scorched to bring a crop to maturity. Even the grass, which shoots as the floods retire, is soon withered, and becomes useless either for thatch or pasture. The extent of such, so far as I saw, is exceedingly small, but the agents of the zamindars reported a great deal. It is very different from the high sandy lands of Puraniya, which in the rainy season give tolerable pasture, and with manure, would give crops of grain. Of such I have seen none in this district. Near the Ganges a thin, poor land over sand gives light winter crops of pulse and linseed, and is called in the Hindi dialect Balusundri and Reti, but the former appellation in some places is given to the best free soil. I have little doubt but that in the interior it would yield the same crops.

The soil in some few parts contains so much coarse sand and gravel, that it is unfit for the plough; but yields trees, and might be employed in plantations for rearing Tasar and Lac. Where the soil is good and only contains many small pebbles, as I have before said, it is abundantly productive to reward the labour of the farmer.

Among the circumstances in some places alleged to render the soil totally useless, are calcareous nodules (ghanggat) mixed in the earth, and an efflorescence of soda from its surface. In some places these calcareous nodules cover the whole surface, and there not a pile of grass is to be seen; but the whole extent of such is very inconsiderable; and where the nodules are imbedded in a soil of red clay, and placed some way under the surface, they are far from doing harm. I have indeed observed no lands more productive in the district, even in the same vicinity, where it was alleged that they rendered the land totally useless, as at Bhagalpur. The land impregnated with soda is of a very small extent; and in one place I saw it under crops of a very tolerable quality.

Land of a red soil composes a great part of this district. In some parts it is mixed with so much sand as to constitute a free soil; but in general it is a stiff clay, and without artificial watering it cannot be cultivated, except in the rainy season; but it is very productive of such grains as can then be sown; and, when artificially watered, as in the gardens near Munger, it becomes by far the most valuable land in the district.

The good land of an ash colour in the interior of the country is mostly clay, with more or less intermixture of sand; and towards the boundary of Tirahut, especially, there is much of a very light colour, approaching, when dry, to white, as in Dinajpur. This is stiff; but in most places the soil of this colour is rather free; although in general it cannot be cultivated for winter crops without a few waterings. In some places of the interior the soil is of rather a peculiar nature, which, from its colour resembling that of an ass, is called Kharawa. This contains a very considerable portion of sand; but, when dry, it is very hard; and, when under water, as in worn down paths, the sand and clay separate, the former coming to the surface. This is rather a poor

soil. The richest free soil that I observed in the inland parts is in the extensive estate called Manihari where there is towards the hills a great extent of excellent free soil of a very dark ash colour, in some places, when moist, approaching to black.

On the moveable banks of the Ganges again, where there is no red soil, there is much of a rich blackish clay; during the inundation it is so soaked, that it does not require to be watered to enable the farmer to cultivate it in winter. Its clods however cannot be broken without the help of the implement called Chouki. There is also a great deal of a rich, free, dark ash coloured soil.

In general the natives, especially where the Hindi language prevails, do not distinguish the red and ash coloured soils by peculiar names; but both, when free and rich are called Dorasa, Badiyan, Dhusari, Pasrota, or Kathan; and when very stiff, both are called Chitamati, Kewal, or Karra. It must be observed, so unsettled is every nomenclature among the natives, that in Gidhaur a rich stiff soil is called Dorasa, which everywhere else is applied to a rich free mould. There the latter is called Tori mati. In some parts, however, a distinction from colour obtains; a red or yellowish clay is called Lalmati or Paroti, and a reddish mixed soil is called Bindi. Where the Bengalese language prevails a dark coloured strong soil is called Masina, and a light coloured one of the same nature is called Baliyamati. The Mahishna or buffalo soil, so named from its colour, is by the best farmers considered as uncommonly good, on which account they also call it Pala or the nourisher. In this dialect, while the sandy poor thin soils are called Chama or Chamabala, richer and deep but free soils are called Borat, and stiff clay is called Atiyal, Matiyal, and Koska.

The low lands near the Ganges, and on its northern side, are liable to the same uncertainty and irregularity of soil, that I have mentioned in my account of Puraniya; but are in general reckoned by the natives the best of the district, although in some parts of it they are totally neglected, especially between Rajmahal and Teliyagarhi; and, to say the truth, much of the higher land, as near Munger and Bhagalpur, seems to me more valuable; but it undoubtedly requires more trouble in cultivation.

*SECTION 3rd.  
Elevation.*

On the accompanying Map, laid down on the scale of the Bengal Atlas, I have endeavoured, so far as I or my native assistants saw, to give a specific delineation of the hills; but it is evident that our cursory observations must be liable to great errors. Whenever I have been able to specify the hills I have laid them down by a defined shaded line. Where I had no opportunity of discriminating parts, I have confined myself to the plan of Major Rennell and given only a general representation of hills. The scale being too small to admit of the hills being even numbered so far as to refer to an index for their names, I have given a map on a large scale and divided into four sheets. It contains the hilly parts of the district south from the Ganges and was composed by Kamallochan Ray, a native assistant, partly from what he himself saw and partly from the report of well informed natives, especially of two fine young men, nephews of the officer (Swzawul) who manages the hill tribes. These draughts, however rude, may be of use to any person who may be afterwards employed to delineate the country with accuracy or who wishes to estimate its natural productions.

This is a very hilly district. The hills in very few parts compose regular chains of considerable length; in most places there are passages at very short intervals, through which a traveller might pass without any considerable ascent; but in most of the hilly parts these passages have been avoided. This may in a great measure have been owing to the numerous ravines and water courses, by which the land near the larger clusters of hills is intersected, but I presume that sometimes it has arisen from the inhabitants allowing these passages to be choked with trees, and being unwilling to have their strongholds exposed by too easy routes of communication. In the great cluster near Rajmahal the hills themselves, notwithstanding the ruggedness of their soil, are tolerably well occupied, considering the manner in which they are cultivated, as it requires long fallows. Still, however, many of these hills are waste, and the number of people might be considerably augmented.

The other clusters of hills are entirely waste, nor has the smallest attempt been made to introduce among them the use of the hoe. These hills are undoubtedly more rugged than those towards Rajmahal, and more vast masses of rock occupy their surface; besides their nature is totally different, they being what naturalists call primary mountains while the hills of Rajmahal are secondary, and some of them perhaps volcanic. I have however no doubt but that many parts of the western clusters would admit of cultivation, for some of the hills scattered through Fayezullahgunj, although of a primitive nature, have been cultivated with success by the mountaineers. Considering however the load that these people have been to government, their increase ought to meet with no encouragement, and the inhabitants of the plains will not on any account cultivate the hills, lest the purity of their birth should be suspected.

In the account of the different divisions the different clusters of hills which are to be found in the district will be more particularly described; and in the Index to the map will be found the appropriate names of such as I have been able to ascertain. The higher class of the inhabitants, it must be observed, seldom know any name for a hill, except it is a small detached peak, consecrated to some deity, but give the name of the nearest village to the part of the hill by which it is overlooked. The appropriate names of the hills or peaks are only to be learned from the woodcutters or herdsmen.

The whole of these clusters, and even the hills of Rajmahal compose, in the opinion of the natives, a part of the Vindhyan mountains, which extend from the south banks of the Ganges to Setabandha Rameswar near what we call Cape Comorin. In fact the natives consider the vast plain of Hindustan, forming the centre of their world, as bounded by four mountains. That on the south has been already mentioned. On the north is Himalayachal, or the Emodus of our ancients. On the east is Udayachal, the mountains of Ava, unknown, I believe, to the ancients. On the west is Astachal, the Parapamisus of ancient geographers, which separates India from Persia. It is with the utmost astonishment that I perceive Mr. Pinkerton placing on

my authority, the Vindhyan Mountains in Nepal. In some notes relative to that country, which I gave him, I was describing the part of the Nepalese dominions, which lies on the great plains of Hindustan, and this plain I stated to be bounded by the Vindhyan mountains on the south, but Mr. Pinkerton, having preconceived a chain of mountains running parallel to Emodus on its south side, chose to apply the name Vindhya, which he found among my notes, to this offspring of his imagination.

Besides the more remarkable clusters of hills, there are many smaller ones, and many detached peaks, which often spring suddenly from the most level parts of the country, and sometimes from the bed of the Ganges ; but in general there is a considerable extent of swelling ground near the hills, and most of the interior of the country is of this nature, although the swelling ground, and even the hills, in some parts, approach to the very bank of the Ganges. In treating however of the various degrees of elevation, the plain country may be divided into two. 1st, swelling land exempted from the influence of the Ganges, and 2ndly, that liable to be affected by its floods.

The swelling land exempted from the influence of the Ganges is of many kinds, and near the boundary with that liable to inundation is usually in the Hindi dialect called Tikar, in opposition to Dira, which signifies the land subject to the influence of the great river. In the Bengalese the former is called Rarh, and the latter Baghri. In the vicinity of the more considerable clusters of hills, and in the intervals between the more considerable ranges, there is much land that, although of a good soil, and by no means too steep for the plough, yet, on account of numerous streams and water courses, is considered by the natives as totally unfit for agriculture, and indeed would require a race of infinite more industry than the present occupants to bring it under crop. Among the larger clusters, however, are many fine valleys very capable of cultivation, and in the centre of the Rajmahal hills is one in particular of great extent, that formerly was well occupied. Were the country in a tolerable state, such are of great importance because they afford means of subsistence for the people, who should be employed in rearing Tasar and Lac, and in cutting

timber, the only useful produce that could be obtained from the hills and the broken ground in their vicinity.

Among the hills, even where there are no impediments of such a nature, and where the soil is excellent but swelling, it is in general much neglected or only occupied by vagrants from Virbhumi or Ramgar, who cultivate a part for a few years, and desert it whenever a considerable rent is demanded. Enough has been done in the vicinity of the capital, and in Fayezullahgunj, to show that under proper management no part of the district would be more valuable. Where the soil is good it produces most luxuriant crops of Maize and other coarse culmiferous grains, of Arahar, Ricinus, and cotton, and with a little manure excellent crops of wheat and mustard. Where this swelling land is poorer, it still produces most abundantly sesamum and some kinds of pulse. It is highly favourable for plantations, especially Tal Khajur and Mahuya, and for the trees used in rearing tasar and lac although the hills and broken land in their vicinity are more than sufficient to rear 20 times more of these than is demanded; and none should be encouraged on land fit for other purposes. In some parts this ground is very dry, and when it has been long waste and is bare of trees, it assumes in the dry season a kind of rocky appearance, as is very common in many parts of Mysore; but the climate here being more favourable, such sterile appearances are less common, and after rain it readily yields to the plough.

In many parts, between these swelling lands, there are narrow winding levels, which often are supplied by the water of springs, or at any rate receive all that runs from the higher grounds. Such levels, in the more wild parts of the district, usually called the Janggaltari, are considered as almost the only thing of value, and are appropriated entirely to the cultivation of transplanted rice, which there is called Sali. These lands are often called by this name, in others they are called Kol, and in fact are very valuable, as the crop seldom fails.

Where the swells are more moderate, and the general declivity trifling, this low interior part of the country is in general also reserved for winter rice alone, and in some places is called Kheri, but the crop, notwithstanding

some pains to collect water in reserrvoirs, is extemely uncertain, so that for the last three years almost the whole land of this kind has lain waste, the rain having been scanty. Such land should never be indeed cultivated for rice. It would certainly produce excellent crops of Maize, Ricinus, Arahār and cotton, and these on the whole would be more advantageous than the rice, although when a crop of this succeeds it is of great value, as it is of a very fine quality. On this account, to judge from what I saw, I am persuaded that about  $8\frac{1}{2}$  per cent of the whole rented land was last year fallow.

The most valuable part of the interior country is some level land, which lies near the rivers and receives a supply of water by canals dug from their channels. The crops from such are very certain and productive, and consist chiefly of wheat, barley, rice, mustard, fine pulse, and sugar-cane. In many parts of such land water may be had, for irrigation by machinery, at the depth of a very few feet, and seldom is sunk at such a depth as to preclude the use of such means, were they necessary; but the canals render the trouble superfluous. In some years such lands are liable, in great floods, to be covered 2 or 3 days at a time, but on that account I have not called them inundated, as the circumstance is accidental, and does not affect their cultivation farther than by occasional losses.

As intermediate between the lands under the influence of the Ganges and those exempted from the changes produced by that river, may be mentioned the places called Chaongr, which between Suryagarha and Mallepur, between Tarapur and Kumurgunj, and in Kodwar form a very considerable extent, and in Major Rennell's map the first is represented as a lake. In fact the first rains that pour down from the hills cover with water these places, which are very low and are situated near the hills. In some places, but not all, the water of the Ganges, at the height of the floods, penetrates up the channels by which these fields are drained; but in September the water begins to find vent, and in October they become dry and fit for the plough. The natural produce of these places, where the soil is rich, as is usually the case, is the wild rose tree of this country, already often mentioned,

and here called Koyakangta. In some parts, as Kodwar, such land is considered as totally useless, while to the west of Mungger not an inch of it is waste. With little or no trouble it produces wheat, barley, and pease, for one ploughing suffices, and the operation is performed as the waters retire, and while the soil is quite soft.

South from Rajmahal, at the foot of the hills, is a very extensive tract of this kind ; but which as it always retains a great deal of water in the centre, is called a jhil or lake, and is cultivated in a different manner, the edges of the lake being planted with Boro rice, as the water retires.

The parts under the influence of the Ganges in the Bengalese dialect are called Baghri, and in the Hindi language Dira. These lands are not all of an equal level, many parts are entirely exempted from water, except in the very height of the floods ; and the water in ordinary seasons may, with very little trouble, be entirely excluded. Such lands are in general very valuable, and as affording a situation for houses and gardens are called Bhita ; although in some places, especially on the north side of the river, and in the east corner of the district, they are much more extensive than is required for those purposes, but still are highly valuable, as they produce two crops in the year.

The lower lands regularly and constantly inundated in this district seldom produce anything except winter crops ; but these are in general very certain. In Behar rice is seldom sown on such, but in Bengal the rice is often sown before the floods begin, and springs as fast as these rise.

In some parts these lands liable to be affected by the Ganges are considered as highly valuable, as in fact they are, the mud which it deposits serving as a rich manure ; but in others they are totally neglected, and the natives consider with astonishment the proposal to cultivate ground that is three months annually under water ; although within a few miles of their neglected land they may have seen similar ones highly productive.

Intermixed with these lands under the influence of the Ganges, in the north-western parts of the district as well as in Puraniya, are many marshes overgrown with the

wild rose and tree called Hijar, and considered as totally useless.

Close by the water on the very lowest parts, some muddy banks appear in the dry season, and are called Pangka. On these Boro rice, Ajoyan, mustard and two or three kinds of pulse are sown without ploughing.

In the General Statistical Table (No. 1), I have included among the inundated lands not only those which are covered by the swelling of the Ganges and its branches, but those covered by torrents from the hills, or what is called Chaongr. A great part is only covered at the height of the floods, which return 2 or 3 times a year and cover this higher part for 3 or 4 days at a time. On first hearing the natives speak on the subject, I was led to consider the floods as vastly more formidable than I now think they are ; for I perceive that in most parts very few boats or canoes are kept, which would be indispensable to every family were the floods nearly so copious as towards the East. Many very considerable fields, or rather spaces, are too low to admit of plantations or villages, and in the dry season form uninterrupted sheets of waving corn, two or even three miles wide, to which the people repair from the bordering high lands to reap, and to which distance they must go to labour. In the 2d Table will be found an estimate of the proportion of inundated land that continues to be covered during the whole floods, and of that which is only flooded for a part of the rainy season

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## CHAPTER 2ND.

### *Of the Rivers.*

In treating of this subject, I shall first state what I have to say respecting the Ganges, then I shall describe the rivers which fall into its northern side; and finally mention the torrents which join it from the hills of the south.

### *SECTION 1ST.*

#### *Of the Ganges.*

Above Munger the great sacred river of the Hindus forms the boundary between this district and that of Tirahut for about thirty miles. In the time of Major Rennell, at the western extremity of this line, there was a large island in the river, the southern arm of which received the Kiyul river. This arm having become dry, the island is now conjoined to the southern shore; but a small channel remains, which conveys the water of the Kiyul to Suryagarha, and is called by that name. From Suryagarha, a place of considerable trade, the river runs about 11 miles with a very wide uninterrupted channel to the boundary of division Munger. On this part of the river is Madani-Chauki, a place where there is a very little trade. At the boundary of the division of Suryagarha the Ganges divides into two arms, which surround a long winding island, extending to Munger, and giving rise to numerous disputes among the proprietors, and native officers of police of the two districts. In the time of Major Rennell there were in this space several small islands which have now united into the one above mentioned, although this is still intersected by several small channels.

From Mungger, a place of great trade, to Patharghat, the Ganges has this district on both sides for almost 60 miles. Immediately below Mungger the river, since the time of Major Rennell, has encroached much on both banks, especially towards Sitakunda, and has formed in its channel some very large islands, the property of some of which is keenly disputed by sundry persons. In many parts of this course the right bank of the river is rocky, so that it can make no farther encroachments. The channel between Sitakunda and the islands is smaller than that on the west, and in some years has been fordable. Opposite to the lower of these islands a branch of great length separates from the left bank of the Ganges, which it rejoins far below. It passes East for about 13 miles through the division of Gogri, where it is called Baharkhal. It then takes a large sweep north to reach Bihipur, a place of some trade, passing by Madhurapur, where there is some commerce. At both these places it is called merely a branch of the Ganges, and in fact this part of it, in the time of Major Rennell's survey, was the northern side of a large channel of the Ganges, which then passed Bihipur (Behpour, R.) This channel is navigable in the floods; but in many parts becomes quite dry during the fair season. From Bihipur it passes south about six miles to Sibgunj, a place of considerable trade, where it is called the Kalbaliya, but is navigable in the rainy season alone. It rejoins the river about five miles below.

The southern side of the same channel of the Ganges, in the time of Major Rennell passed Bihipur, but now forms a branch called Ganggacharan which runs within the former, and on which agriculture is making rapid encroachments.

Below the islands and Sitakunda we have, for about 14 miles, a very uninterrupted channel, about a mile wide, but in the dry season one half, or perhaps more, is a white glittering sand. This is chiefly on the Northern and convex bank, which is low, while the water keeps near the south bank, which is a high red clay filled with calcareous nodules, strongly resisting the encroachments of the river. On this part of the river is Kumurgunj, a mart where goods are imported

and exported. At the end of this uninterrupted space, towards the east, is a vast rock of granite surrounded entirely by the stream, with another adjacent to the southern bank. Both have been long dedicated to the various superstitions, which in succession have influenced the people, and the singularity of the situation still excites the devotion of multitudes. At this place is Sultangunj, a place of some trade. Below this, in the time of Major Rennell, a branch of the river took a sweep to the north, forming a large island; but this branch in the dry season is now stagnant, and in most places cultivated; while the small island, laid down by our geographer south from the larger, has now grown vastly larger, and has on its northern side the chief branch of the river. This island is now a subject of dispute between the people of the divisions of Lokmanpur and Kumurgunj.

Opposite to this, as in the time of Major Rennell, and extending towards Kahalgang, is a channel of the Ganges, which is called Yamuniya or Jaoniya. Very considerable changes have however taken place on these parts since the time of that distinguished geographer. The channel in its upper part has contracted very much, and has been broken off by the branch of the river, which surrounds the disputed island; while its lower [part] has been very considerably enlarged, and is navigable throughout the year. Its channel however is again interrupted by the great river, which has carried away the islands opposite to Barari (Berraddy R.), in lieu of which a part added to the northern bank is now claimed by the people of the Kotwali division. Still farther the river has worn away a great part of the northern bank, and has greatly enlarged the width of the lower part of the island between the Yamuniya and Ganges. The length of this island, towards the east has however been very much curtailed, and three immense rocks of granite, north from Kahalgang, which in the time of Major Rennell were included in this island, are now in the middle of the river, forming one of the most picturesque scenes that I have ever seen. From these rocks to Patharghat the river sweeps some rocky hills, and two small remnants of the former island still resist its power. One of them, opposite to Patharghat, is supported by a rock of granite.

which, when the river is low, rises a little above the surface. On the enlarged part of the Yamuniya the only place of trade is Bhagalpur. On the south bank of the Ganges, in the whole of this extent, the only place of trade is Kahalgang; and on the Northern bank the only place is Sahali, at the mouth of the branch of the river called Kalbaliya. A few miles below the mart called Sahali the Ganges sends, from its left side, a small channel, which after a course of eight or nine miles rejoins the great stream, just before that unites with the vast body of the Kosi. This channel is called Ganggprasad, and has on its banks a small mart named Pangchgachhiya. It is only navigable in the rainy season.

From Patharghat downwards the Ganges, so far as concerned with this district, has been described in the account of Puraniya. It only remains to give an account of some branches of the river that are included in this district, and of the places of trade on its banks.

Between Patharghat and Paingtgi is an old channel of the river, in many places both wide and deep, but in the dry season quite stagnant, and in many places cultivated. It extends five or six miles in length, and is called merely Ganggacharan, or a branch of the river. A little below Paingtgi, where there is some trade, what has formerly been an island of considerable size, is now in a great measure united to the division of that name, the channel by which it was separated being now very narrow, and for the greater part of the year is quite dry. I could not learn that it had any name.

Between Teliyagarhi and Sakarigali are large islands in the river, but the principal channel goes by their northern side, and in spring the channel on their south contains little water. The Darogah of Paingtgi claim a jurisdiction over the whole, but he acknowledges that the larger share pays its revenue to Puraniya, and the officers of police there considered their jurisdiction to extend over whatever was under the management of the Collector. Opposite to these islands is Ganggprasad, a place of some trade, although in the dry season small boats only can approach. Below Sakarigali, where goods are exported and imported, are other more extensive islands, also much disputed, as I have mentioned in my

account of Puraniya and the branches by which they are surrounded are navigable at all seasons. Above Masaha there is in the undoubted possession of this district an island, which is separated by a channel called Pangch-gachhiya, that of late has been fast advancing to obliteration.

Since the time of Major Rennell the bend of the river between Masaha and Rajmahal has been entirely obliterated, the main channel of the river passing straight between the two places. The old course is now marked by a channel, in some places cultivated, and called the Baramasiya. On this part of the river Rajmahal is the only place of trade. Opposite to Udhawanala (Oudan-ulla R.) the river has made many changes since Major Rennell drew the plan of the lines erected there by Kasemali. It has at one time encroached, and carried away almost the whole fort; but it has since retired to a great distance, and left an extensive cultivated tract divided by two channels, one of which separates into two arms. In the dry season these are not navigable; but in some parts they are wide, and contain large pools of stagnant water. They have no peculiar names and are called branches of the river.

At Phutkipur the Ganges sends an inconsiderable branch called the Pagla to join the Gumanmardan; and some miles below it sends another, called the Khajuriyamohana. Neither is navigable in the rainy season.

At Mohangunj the smaller Bhagirathi sends off another Pagla, encircling Mohangunj, and separating this district from a portion of Dinajpur.

A little lower down the Bhagirathi sends towards the West a channel called the Kirtaniya, which afterwards bends south to Thanah Pratapgunj, where it communicates with a branch of the Gumanmardan. It afterwards turns east to rejoin the Bhagirathi, near Thanah Aurunggabad; but in this space it sends from its south side two branches, and receives on its north a channel, which separates from the Bhagirathi a little below the Kirtaniya, and, after running some way S. W. by the name of Uparjani, turns S. E., and is called Kalapani. The Kirtaniya in December is in many places dry; but the Kalapani contains a great deal of

stagnant water. Both the branches sent from the Kirtaniya go into the Virbhumi district, and join a river called Baranadi, that will be afterwards mentioned. That towards the West is first named Boyaliya and then Kaksa. That towards the East is first named Madhojani, and then Chanduni. The Madhojani is a pretty large creek, but in December is stagnant, and its water is then very dirty.

In my account of Puraniya I have mentioned, that in the rainy season 1809, the lower channel of the Bhagirathi, leading to Calcutta, had been entirely shut; but in the following year it opened again, and was nearly of the same size with the upper channel; both however suffered a considerable diminution, owing probably to the new communication opened below the Jalanggi. On the upper channel, within this district, Mohangunj and Kaligunj are inconsiderable marts for exportation. Songti laid down by Major Rennell in this district, has been removed to the opposite side of the river, and placed in a corner of the district of Murshedabad.

#### SECTION 2d.

##### *Of the rivers on the north of the Ganges.*

The first river, that occurs in proceeding down the left bank of the Ganges, is that which Major Rennell calls the Bogmutty (Vagwati); but which now, at least the natives call the Gandaki. The Vagwati derives its appellation from one of the names of the spouse of Vishnu, and in the valley of Nepal, where it has its source, is considered as holy; but on reaching the plains of Hindustan, it loses [sic] its importance, and in the Tirahut district joins a small river, which passes Mozaffurpur, its capital, and which is called the lesser Gandaki. Although the Vagwati is by far the most considerable stream, yet as this Gandaki is probably an old channel of the great river of that name, the united stream is most commonly called Gandaki, and channels alone, that proceed from it in different parts, are considered as the Vagwati. The Gandaki for 9 or 10 miles forms the boundary between this district and Tirahut. It then communicates with the Ganges by a small channel, which contains water only in

the floods, which is considered as a branch of the Ganges (Ganggacharan) and which forms the boundary between the two districts. Immediately after the Gandaki reaches the boundary of this district, it sends from its left bank a small branch called Kamaladahar, which is only navigable in the floods, and which will be afterwards mentioned.

Soon after the Gandaki has both banks within this district, it sends to its left another channel named Kalyana, to which also I shall have occasion to return, and which is navigable only in the floods.

Five or six miles below this separation, the Gandaki divides into two branches. That to the right in the dry season conveys its water to the Ganges after a course of about two miles, and is navigable at all seasons; but in spring does not admit boats carrying more than 500 mans. On its banks are Mahesgunj, Ranigunj, and Raghunathgunj, marts for the exportation of goods. The other branch of the Gandaki is by the natives considered as dead, on which account it is called Mara Gandaki, and soon after its separation divides into two branches, which reunite a little below the town of Gogri. The one farthest west I found in February 1811 to be a very wide channel containing a great deal of stagnant water, which in some pools is very deep, but other parts are almost quite dry. On its bank is Nandalal, a place of some trade. In the rainy season large boats go to it. The branch of the Mara Gandaki, which passes Gogri, is less considerable than the other, as in the dry season it is a mere marshy channel, which soon after separating from the other sends off to the East a large branch called Kangsraiya that is lost in a marsh which surrounds the fastness of a former Raja (Chandalgar). In the rainy season boats of 1000 mans burthen reach Gogri, which is a place of considerable trade. From the reunion of its two branches the Mara Gandaki runs between two and three miles to join the Ganges, and has on its bank a small mart named Bahalalpur, to which boats can only ascend during the rainy season.

From this part of its course the Mara Gandaki sends, towards its left, a small branch named the Dakuyanala, which after running east some miles turns to the

south, changes its name to Jamalpurkadahar, and joins the Baharkhal already mentioned.

These numerous changes in the course of the Vagwati have given rise to violent disputes, that have greatly impeded the improvement of the country.

I now proceed to the river called Gogaree by Major Rennell, and which, according to the orthography that I have adopted, is in some parts called Ghagri, and in others Tilyuga.

From Tirahut it enters the division of Gogri, in an exceedingly neglected part of the country, as a very considerable stream, navigable at all seasons for small boats or canoes, and in the floods admitting large vessels. Its current is then said to be uncommonly strong and destructive; but this account appears to me very doubtful, and seems to have been given merely as an excuse for the wretched state of cultivation on its banks; for it is uncommonly winding in its course, is sunk very deep below the surface, and its banks do not seem to be much broken. It abounds in fish, and harbours many crocodiles.

For some little way the Ghagri forms the boundary between this district and Tirahut. It then, under the name of Tilyuga, passes ten or eleven miles through the division of Gogri, and there receives from its right bank the Vagwati, I presume a branch of the Gandaki, that comes from Tirahut. This Vagwati passes through a very wild part of the division of Gogri, and then receives from its right another similar small river named Chandaha, which has been already mentioned as communicating with the Vagwati. The Chandaha has a course of several miles through the same wretched country. After its junction with the Chandaha, the Vagwati runs a little way farther east, and communicates with the Gandaki by the Kalyana, as already mentioned. About 8 miles below this, it is lost in the Tilyuga. This last river, about 12 miles below its junction with the Vagwati, receives from the North a small stream, which is named the Katnai, and which comes from Tirahut, just where the division of Lokmanpur joins with that of Gogri. In February it had a considerable stream and at Mahinathnagar, where I crossed it, was not fordable.

At that place it receives from the N. W. a very large but stagnant channel called Tilawe, which forms the boundary between this and Tirahut for about 12 miles, and its banks are very well cultivated. From Mahinathnagar the Katnai runs about eight miles to join the Tilyuga.

Three or four miles below the mouth of the Katnai, the Tilyuga receives from the north a small river named the Loram, which comes from Tirahut, and runs through part of the divisions of Gogri and Lokmanpur, more like a narrow winding marsh than a river.

A little below the mouth of the Loram the Tilyuga divides into two branches. The southern retains the name, but it is comparatively the smallest; and though in February its channel is very wide, it contains only a small clear stream. The northern branch is called the Ghagri, and in February, where I crossed it, it might contain 150 yards of water, deep but nearly stagnant.

After a separation of about 12 miles the two channels reunite, after the northern has received the Dayus, which has been described in my account of Puraniya. The united stream of the two branches retains the name of the Ghagri until it falls into the Kosi, as has been described in my account of Puraniya; but in this district it communicates with the Ganges by a channel of considerable length called Sukhani, which is said to be an old channel of the Ganges.

Within this district there is no place of trade situated on any of these branches of the Ghagri, owing more to the wretched condition in which the vicinity is than to a want of convenience in situation.

#### SECTION 3d.

##### *Of the rivers south from the Ganges.*

These rivers have a very different aspect from those that I have hitherto described, either in this district, or in those that have been previously surveyed, and more resemble the rivers of Mysore. Although the channels of some of them are of great width, none of them in this district is at any time navigable, except in the Eastern corner, where in the floods the water of the Ganges, filling the lower parts of their channels, renders them

penetrable for small boats. Even the largest of them, having channels from 200 to 400 yards wide, are in general fordable throughout the rainy season, and foot passengers even seldom find them too deep or rapid for more than three or four days at a time, or oftener than three or four times a year; but several of them at that season assist in floating down bamboos and timber, although the natives do not avail themselves of this assistance so much as they might. The practice is indeed almost entirely confined to the rivers that fall into Virbhumi.

In the dry season it is chiefly near their sources, that these rivers contain any visible stream, and then each of the numerous small branches appears to contain a greater quantity of water than the vast channel worn by the united force of these torrents, when swollen by the periodical rains. The widest channels, indeed, appear in spring a perfect dry sand, but by digging a foot or two deep, good water may at all times be procured, and it is evident, that this subterraneous water has in some cases a current, as canals dug obliquely across the channel collect a small stream, which may be conveyed to some extent, and with great advantage for the purpose of irrigating the fields. Having premised so much, as common to the greater part of the rivers I am about to describe, I shall proceed to particulars, commencing as before at the west end of the district.

The Kiyul comes as a considerable channel from the country called Kharakdiha in the district of Ramgar, and leaving the old castle of Gidhaur at some distance from its western bank, receives, nearly opposite to that fortress, a river called Maura. The Maura rises by two sources from a chain of hills, which runs parallel to the frontier of the division of Mallepur, and at no great distance from it, in the district of Ramgar. The western branch is called Sukhanar, the eastern Baranar, these names signifying the dry and the great Nar.

The united streams of the Maura and Kiyul have formed a channel, not less than 400 yards broad; but in March, when I saw it, there was no stream, and only a very little stagnant water in a few pools, at great distances from each other, and of inconsiderable size,

Not only however its main channel, but several tributary streams afford a great supply of water for irrigation, and their banks are one of the finest parts of the district.

About two miles below the mouth of the Maura the Kiyul receives, from the East, a fine river named the Ulayi, little, if at all, inferior to it in size. This also arises in the Ramgar district, where it is said to run through a narrow passage called Kewalghat, ( Kewal R.) and then over a rock of white marble, immediately below which it enters this district in the division of Mallepur. There I found it in a narrow passage called Ghoramara, ( or the death of horses ), a name not unapt to a passage very formidable to cavalry. In the parching heats of March, the Ulayi at this place contained a very fine stream, the largest I think, that I have seen among the hills of this district ; but fordable by a child. About 10 or 12 miles below Ghoramara the Ulayi receives the Nagini, a torrent of short course, which contains a pretty stream, and comes from the hills towards the East.

Before the junction the greater part of the stream of the Ulayi is absorbed by its sands ; and, where I crossed it, a few miles lower down, there was no stream and a little water stood in pools, as in the Kiyul with which it unites.

Below this junction seven or eight miles the Kiyul receives the Angjana, the nymph of which, having been impregnated by Pavan, the God of storms (Eolus) produced Hanuman (Pan), the prince of monkies (Satyri), and companion of Ram (Bacchus). No part in fact, that I have seen, abounds more with the animals called Hanuman. This river is also remarkable for its source, which commences with exceeding fine hot springs, that will be described in my account of the natural productions. These springs are about 12 miles in a direct line S. W. from Mallepur, near which the Angjana joins the Kiyul, but the course of the river being through a very narrow valley, winding among immense rocks, its length is at least double the direct distance. The warm sources of the Angjana form a pretty stream, which is soon increased by numerous small springs, and it continues a fine little stream, capable even in spring of turning a mill, until it reaches the plain, through which

it passes south in a deep dirty channel of clay for about five miles, when it is turned towards the N. W. by the Pangchakut hills close to Thanah Mallepur, and surrounded on all sides by its jurisdiction, but belonging to Ramgar, and said to be the scene of some of the exploits of the god Ram.

At this hill the Angjana receives a small river called the Nakti, which comes from the west for about three or four miles. At the middle of that course the Nakti receives from the north a small river, which rises from the hill called Kusumbhi by two sources, the western called Keruya, and the Eastern named Bhajaha. On the junction the latter retains the name, and passes through the plain, a dirty puddle in a deep channel of clay.

The Nakti is composed of two rivers the Kathra and Mata. The former rises, with three sources, near the great hill called Ganda, on the boundary between divisions Mallepur and Tarapur, and has a course of 15 or 16 miles in length. The southern branch is named Sabuijor, and the Northern Dhobejor. The name of the middle one I omitted to learn. Jor, it must be observed, implies the stream formed by a spring, near where it issues in the mountains, and Kol the recess in the mountains from which a stream issues.

Mata, the Northern branch of the Nakti, has a course from the west of 7 or 8 miles, during which it receives the Jamkhor. This is composed of two torrents, that on the West called Jamkhar, and that on the east called Kasai: both come from the same hill, that gives rise to the Bhujaaha.

The Mata is again composed of two rivulets, that on the south called Malmala, and that on the North called Bajan. The former has a short course from the west, but the Bajan comes a considerable way from the North, rising from the hill called Khoranda, and according to the ideas of European geographers ought to be considered as the source of the Angjana, being the longest branch of the river; but I shall content myself by calling rivers by the names by which the people who live in their neighbourhood know them. The Bajan, immediately before it loses its name by a junction with the Malmala, receives from the East a small river called the Bhongr.

When the Angjana has passed the hill called Pangchakut, and has reached the town of Mallepur, it forms a wide sandy channel, in which during spring there is no stream, but there are some stagnant pools on the surface. The water in these is dirty, and is considered as unwholesome. When water is wanted for drink, a hole is scooped in the sand, about one foot deep and two wide; the first water that rises is thrown out, and what springs in a few minutes afterwards, is taken up with a small cup, and is very good.

A very little below Mallepur the Angjana is lost in the Kiyul, and the river from thence, to where it formerly joined the Ganges, is the boundary between the district of Behar proper and Bhagalpur.

Immediately below the junction of the Angjana the Kiyul receives from the hills of this district a fine torrent named Vaghdar or tiger catcher, which forms the boundary between the Rajas of Kharakpur and Gidhaur, all the low land south from thence, on the East bank of the Kiyul, belonging to the latter, and not to the former as represented by Major Rennell, who probably could not penetrate into this part of the country, owing to the troubles of the times, for his map of these parts can by no means be reconciled with appearances.

Between this boundary and the hill called Silhat, on the boundary of Gidhaur to the North, two other torrents come from the hills of this district to join the Kiyul. The first, named Manika, has a very short course. The second is named the Morabe, and at no great distance from its mouth divides into two branches. The southern named Langgura has a short course, but the northern, which preserves the name Morabe, winds 10 or 12 miles through a narrow valley, before it enters the plain, and while in this valley, receives the water of a fine spring dedicated to Siva under the name of Singrikhnath.

In my account of the Ganges I have mentioned that an island, which in the time of Major Rennell's survey was opposite to the mouth of the Kiyul, has now united with the southern shore, from which it is only separated by a small channel called the Kiyul, and which runs along the foot of the old bank of the Ganges all the way to Suryagarha, or for seven or eight miles in a direct line

In spring this is in some places almost dry, but in the floods boats continue to take in a load from the old bank at Nawabganj, a small mart. Both sides of this channel are most highly cultivated ; that on the North, however, does not belong to this district until within a short distance of Suryagarha.

Near the last mentioned town this low part of the Kiyul receives two channels, very near each other. They are very wide and deep, but in spring when I saw them, contained only stagnant pools in certain parts, while in others they were quite dry. In the rainy season the whole country is under water, nor does any torrent from the hills appear to reach them. The uppermost and largest named the Kasai, immediately before it reaches the Kiyul, receives a branch called Garkhi or Gondro, and some way farther up another named the Had, both from its right side. The lower of these channels is named Bahuyara, and communicates by a small channel with the branch of the former named Garkhi.

In the Bengal Atlas south and west from Munger is placed a large lake, sending two small channels to the Ganges. The lake has totally disappeared, its situation in spring being covered with one continued sheet of wheat and barley ; but the two channels remain. They are both of considerable size ; but in the dry season contain only a few stagnant pools of dirty water. The uppermost is called the Singgiyanala, and is formed four or five miles from the Ganges by the union of the Amara and the Mahelasariya. The former is towards the west, and rises from a recess of the same name in the principal ridge of the Munger cluster of hills. Within the recess it contains, even in April, a fine little clear stream, but this is entirely absorbed as it reaches the plain of Laheta, through which it passes to the gap between the hills of Gabsiya and Dasduyar, and then enters the Gangetic plain, where it unites with the Mahelasariya. This comes from the plain of Laheta by the gap between Dasduyar and the hill of Mahelasariya, from which it derives its name. Just before entering this gap, it is formed by the union of two torrents. That to the west is named Garaiya, and rises from a recess (Kol) in the ridge of hills above mentioned, in which it contains some

### 30 THE DAKRANALA AND THE GHORGHATNALA

stagnant pools that do not dry in spring, and serves to irrigate the fields of Laheta. The eastern branch named Bhela has the longest course of the three, and rises in a deep and magnificent recess of the same ridge, under its highest peak Marak, from whence it derives its name. From this recess it passes west for some miles, through a neglected valley between the great ridge on the left, and a large detached hill on the right, which here is called Ghati, but is the same with what, in the gap last mentioned, is called Mahelasariya.

The eastern channel, laid down by Major Rennell as proceeding from the lake, is called Dakranala. Its most remote source comes from a fine recess in the great ridge above mentioned, just in the angle where it changes its direction from East and west to North and south, and which is called Karelikol. Within the recess is a perennial stream, but on entering the valley between the ridge and the detached hill above mentioned, but here called Kasu, it is absorbed, nor in spring does it contain any stream, although in its course north it receives four torrents from an equal number of recesses in the ridge. The northernmost of these is the most considerable, and is called Murghat. It comes from a very fine recess, divided into several smaller, which afford most picturesque scenery, and the most frequented passage over the mountains called Amjhorghat. Dakranala, formed by these united torrents, is a very deep wide channel, with steep banks of clay, containing stagnant pools of dirty water.

About 3 or 4 miles above Thanah Kumurgunj the Ganges receives a small channel, named after an adjacent village the Ghorghat nala. About a mile from its mouth this receives a small channel, which comes from the Ganges near Sitakunda, and runs parallel to its bank, and which seems to have been formed since the survey was made by Major Rennell. It is called Kodalkati, or the channel dug with a hoe, but is said to be natural, and to be an old channel of the Ganges ; which since the time of Major Rennell must therefore have encroached very much here and again receded. The Kodalkati receives from the west a small channel called the Ubhi-nala, which at all seasons contains a good deal of water,

received from two fine hot springs that arise from the East side of the great ridge of the Munger hills, and which will be afterwards described.

Immediately above the mouth of the Kodalkati, on the Ghorghat river, are Ghorghat and Katgola, two marts, to which boats can only come in the rainy season. Immediately above these again the Ghorghatnala is formed by the union of two torrents, called the Man and Mohane.

The Man has the shortest course, and is situated farthest west. It rises from Belan, a detached hill of the Munger cluster, about 17 miles in a direct line from its mouth. Immediately below its source it passes a gap called Bhimbandh, and situated between the hills named Maniktham and Mahadeva ; and there, in March, contains many deep pools with a considerable stream between them. Soon after it receives a great accession of water from 3 warm streams, that issue in numerous hot sources from the east side of Mahadeva hill, as will be afterwards described. From these springs it runs north through a wild valley, having Badriya and Sayasin on its west, and Sidayi Viswambhara and Murla on its East. At the North end of the last hill is a small cascade called Haha, which was the favourite haunt of the Rajas of Kharakpur, when in a state of rebellion. Immediately below this the river, as it turns East through the gap between Murla and Dhawa, is joined by another torrent named Pangchkumar, which rises from Keruyadalan, a hill about ten miles west, and situated immediately under the mountain Marak.

On leaving these hills, the Man runs about four miles East to Kharakpur, where at all seasons it contains a pretty stream. In this space it receives from the right a small torrent named Patghagar. It then runs south through a fine country, and before it joins the Mohane receives, a torrent named Jalkunda, which arises by several heads from a deep recess in the great Munger ridge, a few miles south from the hot springs of Rishikunda.

The Mohane river rises on the frontier of the Tarapur and Mallepur divisions, towards the north side of the Ganda cluster of hills about 25 miles south from its junction with the Man, runs for above ten miles through a very wild country, and passes at some distance to the

East of the temple named Ungchanath, where it is very inconsiderable. Lower down it receives two torrents from the concavity of the long hill named Biram or Khoranda, as it is called at its different ends. The uppermost torrent, named Khutiya has a very short course. The lower, named Auraha, joins it at the road between Tarapur and Kharakpur, where both in March are small streams, containing a little dirty water in narrow channels. The Auraha rises by three channels called Bamura, Gaighata, and Subarhi, the first farthest North, the last farthest South.

A little below the junction of the Auraha the Mohane receives the Sakhriya a more considerable river than itself, which rises from the same cluster of hills some miles farther south, and runs parallel to it through the same wild country, but in this upper part of the course it is called Bela or Belhar from a village and guard (Ghat) thus named. On coming to the cultivated country and the village Sakhriya, it takes this name and preserves it to its end. At Sakhriya it is a pretty wide sandy channel, in March quite dry on the surface, but water may be everywhere had by digging to a little depth. Some way before entering the Mohane, the Sakhriya has a narrow clay channel, and in spring contains stagnant pools above ground, and below this it receives a very wide sandy channel named the Chora. This is said to be an artificial cut from the Baruya, and in fact seems to bring down the greater part of the water of that river. In March canals dug obliquely across its channel procure a fine stream of water, which is conducted to a considerable distance to enrich the fields.

The native nomenclature of the three next rivers is exceedingly confused. I shall commence with their principal sources, and trace them and their branches to the Ganges

The Baruya comes from the part of Gidhaur Pergunah that belongs to the Ramgar district, and on the frontier receives from the east a torrent named Budhiyajor. At Karana, a few miles south from the frontier, the Baruya is a channel forty yards wide with a perennial stream. Below that, at some intervals, it receives two torrents from the East: The first, Mathsumbjor, has a very short course; the Karing is very nearly equal to

the Baruya. Some way down this river receives from its left the Tabkuyanijor, which contains a perennial stream and comes from the Ramgar district.

A little lower down the Baruya receives another river, the Khatra, which also comes from the Ramgar district by two torrents, the Mandaha and Patun, both of which in March contain streams. Before it joins the Baruya, the Khatra, for a short way, assumes the name of Katsakra.

The Baruya has now cleared most of the hills, but for many miles it continues to run south through a neglected country until about 10 or 12 miles from Tarapur, where it is a wide sandy channel without any stream, but in March there are shallow pools of water in different parts of its surface, and it sends off many canals to water the vicinity. The largest of these is the artificial branch named Chora which has been already described, and in fact contains more water than the original channel of the river, which passes to the east of Tarapur ; for although at all seasons the farmer can, by the aid of machinery, procure water for his fields, yet a stream cannot be formed by digging a canal, as is done in the Chora.

The Baruya runs southerly from Tarapur for about nine miles, and turning to the east assumes the name of Panisalajhil, having there the appearance of a marsh. The Panisala, after running a little way East, receives from the south a small river, and changes its name to the Nesarachaongr.

This small river commences with a torrent which issues from a considerable hill named Beharu. In the course of a few miles it is called the Tirakhar, the Baramasiya, and Lohagar, which it retains for many miles, and is there a sandy channel 30 or 40 yards wide, and dry in spring. On its left it receives three small additions from the Amra, Gahera, and Gangti. All these wind about very much through a marshy soil, in narrow channels ; but at all seasons they contain some water above ground.

The Nesara runs only a short way to the East, when on receiving a channel from the South it changes its name to the Belatchaongr. This channel commences by two small torrents from the hills, in the vicinity of the

passage called Tahuyarnagar Ghat, which from a neighbouring hill (Rauta) Major Rennell has called Rattah. This channel, as it passes different hills or villages, is called Kusana, Kallya, and Dhamana.

The Belatchaongr runs East some miles, until it receives the Bilasi, which arises from the large hill Beharu, and soon after receives, on its right, a torrent of longer course named Larijor ; but in spring both are quite dry. The stream of the united torrents runs some way south, until it finds a passage called Kujhighat, through which it escapes into the plain. There it is a small sandy channel, quite dry in spring; but by digging, water may at all times be had.

From this passage the Bilasi has on its banks a very fine country, until it joins the Belat, which then runs a little farther East, until it joins the Guriyani, which at present, in size, is the principal channel of the Chandan, the next river, which I shall describe, but being of a modern formation, is not dignified with that name.

The Chandan, according to some rises from a high hill called Jhausa, at the S. W. corner of this district, where it unites with the districts of Virbhumi and Ramgar ; but immediately below it is joined by another torrent which comes from Virbhumi, and is by some considered as the proper source. At Chandan village, about 6 miles from Jhausa, the channel is perhaps 200 yards wide, and at all seasons contains a small stream. Nearly opposite to this village, the Chandan receives from the West a branch named Dhawajor, which is fed by several torrents, about the names of which two persons seldom agree, but most of them contain perennial streams. A little below the village of Chandan the river receives from the right a small perennial stream, the Nimajor, and below that on the opposite bank the Belahariyajor and the Sarpiyajor. Below this, on the opposite side, it receives the Hatkata Belahariya, Lauriyajor and Dumariyajor. The Chandan then passes for some miles through the Virbhumi district, and soon after reaching the division of Bangka in Bhagalpur receives from the right a channel, which rises from the great hill Tiyur by three torrents, called Jalpana, Dandha, and Yamuna. Farther down and from the same side another channel joins the Chandan,

and rises by two sources, the Sahadeva and Maura, which last, on their junction, preserves the name.

Another tributary stream, from the same quarter, rises with three heads, the Patlekha Chiyarbhet and Madhuban. The two last uniting are called Chiyarbhet, which on joining the Patlekha takes the name of Pangchatiya.

The Chandan, from the town of that name to Jamdaha, passes through a most beautiful country, the banks on both sides being cultivated and finely planted, while the supply of water which it affords renders them highly productive. At Jamdaha it may be 150 yards wide, and at all seasons contains a stream. A little below Jamdaha it receives from the left the Kurar, a fine stream scarcely inferior to itself, but which I have not been able to trace with any satisfaction to myself. The Kurar, where it joins the Chandan, may be 120 yards wide, and gives a plentiful supply of water to enrich its banks, which are well occupied and planted. Some way up it receives from the West a small torrent named the Amera, which at all seasons contains water in its sands. Farther up the Kurar receives from its left also, a channel called the Tapsitari, which contains many stagnant dirty pools. The Kurar there is nearly as wide as at its mouth, but contains no stream. A considerable way higher up, on the route from Jamdaha to Bhungrisimar, I came to the junction of the Kurar with a river called the Taljor. Both are considerable sandy channels with rocky banks, and both contain small streams. I crossed the Taljor twice. From Bhungrisimar, at a little distance from the right bank of the Taljor, I proceeded to Chandan town and before I came to the river of that name I crossed the Diba, Ardha, Bala, Kherwa, Megha, Bhongrabadar, and Khungtuya torrents (Jors), all said to be branches of the Taljor or Kurar, and all affording water throughout the year. A rivulet called Duyarbasini rises from a hill named Vaghoya, N. W. from Chandan, and after running some way N. E. is joined by the Khajuriya. The united stream is by some said to be the Kurar, by others to be the Taljor, and I had no opportunity of ascertaining which was right.

From Jamdaha to Jathaurnath, where the Chandan entirely leaves the hilly country, the fertility of its banks

is by no means diminished. At Thanah Bangka its channel is between 4 and 500 yards wide; but even in November its stream is small, and in spring its surface becomes entirely dry.

A little below Bangka the Chandan admits on its left the Urani, a fine river, which supplies its banks with water, and they are most beautiful, and well occupied. It rises about 15 or 16 miles S. W. from its mouth, and soon after receives an addition from Kasmau. A little below this, at Gangti (Guntee R.), I found it in March a fine sandy channel with a small clear stream.

From Jathaurnath the Chandan passes south, for about six miles, through a fine level country, and then separates into two branches. The most considerable is named Andhela, which, after a course of some miles to the N. W. receives a small channel from the other arm, and changes its name to the Guriyani. This, after a course of three or four miles, and after having received the Belatchaongr, as before mentioned, joins the arm of the Ganges that is called Yamuniya about four miles above Bhagalpur.

The branch of the Chandan, which is now the smallest, retains the name for a little way, but running N. E. it soon divides into two branches, the Kankayithi and Pangjarmara. The Kankayithi, which is farthest west, soon sends off a branch called Gordhoyi, which soon loses its name in some land that is flooded in the rainy season and is called Elawachaongr. In the dry season the waters of both disappear. A little below this the Kankayithi divides into two branches. That on the right is also called Gordhoyi or Bujani, and is also lost in Elawachaongr. The other branch, named Mahmudah, after taking a great circuit, joins the Guriyani or principal branch of the Chandan, as before mentioned.

The branch of the old Chandan called Pangjarmara, after a course of some miles, is also lost in the Elawachaongr, and this great temporary lake receives also the Katriya a channel, which drains the low lands of the Ratnagunj division, and is joined by another drain named Kakhra, which joins it from the left. The floods withdraw from the Elawachaongr by the Ghoganala, which falls into the Bhutaha, a branch of the Yamuniya

arm of the Ganges, about nine miles East from Bhagalpur. Some way from its mouth the Ghoga receives from the south a drain from the low lands of Ratnagunj named the Kadoya ; and still lower down the drainings of a marsh called Naran. At its mouth the Ghoga is a deep wide muddy channel, which in the rainy season and so late as October is exceedingly dangerous for elephants, but soon after it becomes entirely dry.

I now proceed to trace another river from one of its most remote sources, as in the native nomenclature no considerable portion of it is distinguished by the same name.

Two torrents, issuing from near the great hill Tiyur, unite in a part of Virbhumi that projects into the southern side of this district, and form a river called Dakayi, which after a course of a few miles, in the division of Bangka, changes its name to Paraba. About nine miles from the frontier the Paraba unites with another rivulet named the Deonar, which a little above the junction receives from the division of Lakardewani a rivulet named there Kanijuri, but this name it soon changes for that of Dhobe, and lower down it is called Baghora.

The Deonar, a little above where it receives the Baghora, divides into two branches, and its name is lost.

The western branch is formed by the union of two torrents, the Jemungya, sometimes also called Deonar, which is on the west, and the Gajariya on the east. The former is a pretty wide channel, which in November contained a small stream. The latter is very small, but near its bank has many springs. These uniting form the Pasuyi.

The eastern branch of the Deonar is called Aurahada, which is a small torrent with a rocky bottom.

The united channels of the Puraba and Deonar form the Chir, which, after a short course to the North, receives from the S. W. the Sukhaniya, still smaller than itself.

The Sukhaniya rises towards the frontier of Virbhumi and after a course of a few miles is joined from its left by a torrent called Bhalki. Farther down, near its junction with the Chir, the Sukhaniya receives, from its left also, the torrent named Agra,

The Chir east from Madhusudan, after having been joined by the Sukhaniya, is a fine sandy channel about 100 yards wide. In November it contains a small stream and sends off many canals for watering the vicinity, which is well inhabited.

Some miles N. E. from Madhusudan the Chir unites with the Geruya, a river somewhat smaller than itself. This comes from the East.

Ascending the Geruya for a few miles, we find that it receives from the South a torrent named Nilji, which in November contains no stream.

A few miles farther up the Geruya receives from the North a river which is more considerable than itself, and in the upper part of its course is called Apruya. This comes from the S. W. corner of the hills occupied by the northern tribe of mountaineers ; and, after a long course towards the West and North, comes to Karariya, where it joins the Harna, which rises from the hills to the East by two courses, the Bangsjuri on the South, and the Gararayi on the North. The Apruya on the junction loses its name, and the Harna is a narrow channel ; but in November its stream is more considerable than that of the Chir.

The Geruya a little above where it receives the Harna changes its name to the Kangjiya, which is a sandy channel, not quite so wide as the Chir, but in November contains a small stream, and sends off canals for watering the fields.

The Kangjiya has a very short course, and is formed by the union of two torrents. That to the West, which is very inconsiderable, is at its source called Lathiwari, but changes its name first to Phataoathar, and then to Samjhar.

The other branch of the Kangjiya is called Yamuni, which has only a narrow channel, but in November contains a stream. The course of the Yamuni also is very short, for it soon divides into two branches, neither of which retain the name. The one towards the north is called Sahariya, the other is called Bangjhi, and rises by two sources, the Lehiriya and Jhapani, which last is farthest West.

The channel of the Chir and Geruya united is called Khattik, and in January contains a stream. The channel is narrow and winds very much.

After a course of some miles the Khattik receives from the east a river named Sundar, which rises from the hills of the Northern tribe of mountaineers and after winding through them for some way enters the plain, and has a course of considerable length. It is a wide deep channel with a sandy bottom, and in January contains a small stream. It receives from the same hills that give it rise a small branch named Kohabara.

A little below the junction of the Sundar the Khattik receives, from the opposite side, a small channel named the Chhota or small Geruya.

Some miles farther north the Khattik receives from the same side a channel of considerable length, which rises from the hill Madhusudan, and is called Gahera. Its channel is narrow, but in January it contains a small stream.

After the junction of the Gahera the Khattik runs north, when, approaching the Ganges, about 3 miles above Kahalgang, it unites with a small river from the hills of Parsanda called Bhayna and assumes that name.

The Bhayna is formed by the union of two torrents the Simri on the south, and the Nima on the north, both very trifling.

Immediately before entering the Ganges the Bhayna is joined by a small channel called the Kharra, and then assumes the name of Trimohani, which like the Ghoga in the rainy season is a very dangerous place for elephants.

Immediately above Kahalgang the Ganges, by a mouth similar to those of the Ghoga, and Trimohani, receives a small river named the Koya. This rises in the hills of Manihari, and after winding to the South for some way by their roots, passes west through a rich plain, on which it commits great ravages, leaving by its changes many stagnant pools and channels. In January it contains a small stream. After clearing the western corner of the hills some miles, the Koya receives a smaller, but in other respects a similar channel called Dhuliya.

Some miles farther down it receives from the N. E. a channel of a very long course, which is named the Narahariya. This is said to rise from the southern face of the hills opposite to Ganggaprasad, and after winding among the mountains for a long way it reaches the plains of Manihari. Here it sends to the north a small channel, which passes through the estate called Madhuban, and falls into the Ganges or rather into a branch of it, between Paingti and Teliyagarhi.

The main channel of the Narahariya passes west through the rich mould of Maniharu, in which it makes great havoc, but in January does not contain a stream.

The Koya, after the junction of the Narahariya, passes a few miles east beyond Bhader hill, and there receives a small channel that comes from Baliya. In its upper part it is called Khungturi, in its lower Changdha.

Between Piyalapur and Badlugunj there arises a small channel named Baramasiya, which running N. W. some miles through a fine swelling country where it receives many springs, enters a fine plain inundated by the Ganges. It then takes the name of Singgiya, and turning to the east, after a course of some miles enters the Ganges a little above Paingti.

A little above Sakarigali a small torrent named the Samdanala falls into the Ganges from the adjacent hills, and forms the boundary between divisions Paingti and Rajmahal.

About four miles south from Sakarigali a small torrent from the hills falls down a precipice, and is called Motijharna, or the pearl of streams. At all seasons it has a small quantity of water, and in the periodical rains forms a cascade, which being visible from the great river has attracted some notice. Like other similar sources, its water in the dry season is absorbed before it reaches the plain, but in the floods it finds its way to the Ganges by two routes. The first is nearly opposite to the cascade, the second forms a long channel that winds for a long way south by the roots of the hills, is named Bagicha, and joins an old channel of the Ganges south from Masaha. The Bagicha at the foot of the hills is a favourite haunt of the Rhinoceros.

Nearly west from Rajmahal a torrent descends from the hills, and in the plain north from the Jammah Musjid forms a deep watercourse, on which a large bridge was built by the Moguls. Before it reaches the bridge, on its way to join the Ganges, it sends a branch to the south which is named the Hemanadi and falls into the great lake south from Rajmahal.

This lake called Domjala evacuates its water by two channels. The one farthest north has most the appearance of a river and is named Udhawanala (Oudanulla R.) which has been rendered remarkable by the vain attempt which Kasemali made on its banks to resist the British arms. After a very short course it joins a small channel of the Ganges. The other channel has more the appearance of a winding marsh, in the dry season has many interruptions, and in different parts is called by various names. At the south end of the hill called Manasa chandi it swells out into a lake, and a little below that receives from the hills to the west a torrent named Purandar. After passing some way farther south it terminates in a narrow channel called the Kodalkati, which falls into the Gumanmardan, the next river that I shall describe.

One of the most remote sources of this river springs from a hill called Sidhari near Ganggaprasad, and runs South among the hills occupied by the northern tribe of mountaineers, through a fine valley that was formerly cultivated with the plough, and is called Tappa Dihā. South from this the Morer, which is the name of this part of the river, runs through a still more extensive valley called Tappa Majhuya, that is still partly cultivated, and is of a very rich soil, and about two miles wide. The river here has sunk a very deep but narrow channel, in which at all times there is a good deal of water, but in the dry season it is nearly stagnant. A little below Majhuya the Morer receives from the left two small torrents, the uppermost called Gordhoya, and the lower Dakayi. Still farther down the Morer receives, from the opposite side, a more considerable torrent named the Chakradaha, which passes through a fine valley, between the hills called Chaungdi and Chakradaha, but this valley never has been occupied.

Having passed a considerable way south through Majhuya, the Morer enters another district formerly cultivated, and called Tappa Babupur. In this it receives, from the hills of Parsanda, a branch named the Joyani, and then takes the name of Gumanmardan. In the rainy season this becomes navigable for small boats; and before it leaves the hills, has on its banks another valley that was formerly occupied, and named Tappa Kangjela.

From Kangjela the Gumanmardan winds, South and East, among the hills, and enters the plains of Rajmahal about 12 miles, road distance, from Thana Phutkipur. It is there a deep but narrow channel with a perennial stream, and during the rainy season admits boats of a good size.

Soon after leaving the hills the Gumanmardan sends, from its South side, a channel named Katasi, which after a course towards the East and South joins the Singgiya Dangra, a branch of the Gumanmardan that will be soon mentioned.

After having sent off the Katasi, the Gumanmardan runs East for some miles through the plain, as a deep but narrow channel, and then divides into two branches, which enclose a large space, and reunite four or five miles below. In the dry season the Northern branch contains all the stream, and runs east to Thanah Phutkipur, just before it reaches which, it receives from the northern marshes the channel called Kodalkati, that has already been mentioned. At Phutkipur the Gumanmardan approaches within a few hundred yards of the Ganges, but then turns South, and immediately afterwards has a communication with that great river by a small channel named the Pagla. Below this, as late as December, it is navigable for small boats.

The southern branch of the Gumanmardan, which in December is a dry but deep and miry channel, sends off a channel called the Koya, which joins the Singgiya, to be afterwards mentioned.

The two branches of the Gumanmardan, having reunited, run East a little way, send off to the Singgiya a considerable channel, which runs south, and on its West side is joined by the Koya and Katasi, as above mentioned, while from its east side it sends off the Gangredaha and

Kungchiyamor, which join the river of Anupnagar, a branch of the Kirtaniya.

The united channels of the Singgiya and Anupnagar form the Malangcha, which is a wide channel but in December contains only a little stagnant water, and soon after receives the Patharghat, and takes the name of Baranadi, but for some way, in the southern part of this district, it is called Masna, although on the frontier of Virbhumi, on receiving the Bangsnai (Bansli R.) it recovers the name of Baranadi, and under that appellation joins the Bhagirathi near Junggipur, but not in this district.

Before I proceed to the Patharghat and Bangsnai, I shall finish what I have to state concerning the Gumanmardan, which after sending off the Singgiya passes some way east, and then communicates with the great Ganges by a channel called the Khajuriya mouth (Mohana).

From this junction the Gumanmardan runs still east for a little way, and then sends off a branch named the channel (Dangra) of Sujapur, which joins the Gangredaha before mentioned.

The Gumanmardan from where it sends off the above mentioned channel runs east a short way and then joins the sacred stream or small Bhagirathi, just where that encircles a small territory round Mohangunj by a branch called the Pagla.

I now return to the Patharghat, which rises by two sources from the southern hills belonging to the northern tribe of mountaineers. The northern branch is called Banggara, and the southern Sidar. The two unite among the hills in a rich but neglected vale, and assume the name of Patharghat or Dubapara, and form a narrow but deep channel, which in December contains a small stream. After a course of some miles and passing through part of the cultivated country, this joins the Baranadi by two mouths, as before stated. These two branches were by my guides called Kama; that to the East is small, the other is a dirty stagnant river of considerable size, and in December except in particular places is not fordable on an elephant.

There is a smaller Patharghat, which is South from the former, and rises by two sources from two detached

hills; that towards the South and East form the extreme possessions of the northern tribe of mountaineers. After a course of some miles to the East, this lesser Patharghat receives from Virbhumi a torrent named Serpurkandor, which rises by two sources from two hills, that towards the East and North form the extreme possessions of the southern tribe of mountaineers. This torrent runs through a projecting corner of Virbhumi and having, as before said, joined the lesser Patharghat, the united streams turn south into Virbhumi, are navigable in the rainy season, and great quantities of firewood are then sent by them to Murshedabad.

The Bangsnai, before mentioned, in the opinion of the natives arises from a village of that name, and for some way forms the boundary between the divisions of Bangka and Lakardewani. After having passed the hill called Amara, it enters the hilly region occupied by the southern tribe of mountaineers, and passes to the East through the whole width of its territory. Some miles before it leaves that, it receives from the North a stream of a longer course than itself, which is called Kabari. This rises from the mountains of Barkop, and winds for a long way among the hills occupied by the northern tribe of mountaineers, and then, entering the territory of the southern tribe soon joins the Bangsnai. On leaving the territory of the mountaineers, the Bangsnai passes East through the estate called Sultanabad for 14 or 15 miles, and then entering Virbhumi takes a sweep to the North among some detached portions of this district, and joins the Baranadi, as before mentioned. On the frontier it is a pretty considerable sandy channel, and in December contains a fine small stream of clear water.

The following rivers all join the Bhagirathi, either immediately or by the intervention of others; but having had no opportunity of tracing them farther than the frontier of Virbhumi I shall only describe their passage through this district.

The Bengdaha is a dirty stagnant creek, rising in the lowlands of Sultanabad, which soon enters Virbhumi.

The Pagla rises by two sources from the two sides of the hill called Korma, belonging to the southern tribe of mountaineers, and after passing the whole width of

Sultanabad enters Virbhumi. Near the boundary it receives on its North side a small channel named the Dhamri, which has a short course through the lowlands of Sultanabad.

South a little from the Pagla a small channel, named Amghati, passes from the wastes of Sultanabad into Virbhumi.

The Brahmani rises from the hilly parts of Lakardewan division and soon enters the territory of the southern tribe of mountaineers, through the whole breadth of which it passes, and, on the frontier of Sultanabad receives three small torrents, one from the North and two from the South, all of which are called by the common name Ghagar. The Brahmani then, passing through a corner of Sultanabad, enters Virbhumi, and some miles below receives another stream of this district, named the Tripathi, which rising in the same manner in the division of Lakardewani, passes through the whole breadth of the territory belonging to the southern tribe of mountaineers, and of Sultanabad, and then enters Virbhumi. On the frontier of the latter it receives from the North a small torrent named the Gosaingbhasa.

South from the Brahmani two torrents, the Chila and Gharmuchara, rise from the territory belonging to the southern tribe of mountaineers. They both afterwards run into the Virbhumi district, and join a branch of the Brahmani. To me they were called by totally different names, but as my guides were uncommonly stupid I prefer the names given by the Zemindar's people to a native assistant.

The Duyarka river (Dwarka R:) rises from a hill called Chakolta, belonging to the southern tribe of mountaineers, and running South East some miles through their territory, passes through a part of Virbhumi. It then passes through a detached corner of this district, and enters Virbhumi again, where it receives, on its south side, a rivulet named Kadari, which bounds on the South the abovementioned projecting corner, that is situated at the extremity of the district in that direction. The Duyarka is a large sandy channel, and in December contains a stream.

The next river that I shall mention is more considerable, and with its various branches is that which chiefly

waters the extensive division of Lakardewani, and during the rainy season is employed to float down timber and bamboos from the very centre of that territory. It rises near the northern boundary of that division, and for some miles runs West, parallel to the boundary of Bangka. Rupnarayan indeed pretends that in that part of its course it forms the boundary, but this is disputed by Kaderali, and I believe nothing but a laudable fear of punishment prevents the dispute from being decided by arms. The Dhobe, after thus running West for some miles, turns to the S. E., and in the remainder of its progress this is the general course of the river. Soon after it receives, from the West, a torrent named Bhimsarbandh, which has a course of a few miles from the frontiers of Virbhumi. To me this torrent was called the Harhariya, very few people in this district agreeing about the names of rivers.

A little below the mouth of the Bhimsar the Dhobe receives, on its opposite side, the torrent named Hardiya, the source of which is near that of the Dhobe itself.

A little north from Nuni the Dhobe receives the Maruka, which rises from a hill to the S. E. named Basko, and winds towards the N. and W., through fine lands, that it supplies with water.

At Nuni the Dhobe is a wide sandy channel, which in November contains a small stream. Its banks, which it supplies with water, are very fertile, and beautiful. Some miles below Nuni the Dhobe unites with a stream which is little inferior to itself in length of course, is named Motihara, comes from the great hill Tiyur in the Virbhumi district, and communicates its name to the united stream, which is not larger than that of the Dhobe at Nuni.

Some miles lower down the Motihara receives, on its left, the river named Bhurburi, the source of which is near that of the Dhobe, but its course is more direct. In the end of November it contains the largest stream that I saw in Lakardewani, owing to its channel being a rock which does not absorb the water so readily as sand does.

South some way from its source the Bhurburi receives from the east a small torrent named the Sagarbhanggajor, and near where it joins the Motihara it receives from the same quarter a small stream named the Tapnayi,

which rises heated to a febrile degree, as its name implies, and as will be afterwards described.

Some miles below the mouth of the Bhurburi the Motihara receives from the West a rivulet of a considerably longer course, which rises in Virbhumi, and is called Tepara.

Still a little lower down the Motihara is joined from the East by a torrent called the Kusaru, which passes through a corner of the country belonging to the southern tribe of mountaineers, and in the end of November contains, on a rocky bottom, a pretty clear stream.

On the junction of the Kusaru the Motihara assumes among men the name of Maur, but in the language of the Gods it is named Maurakshya. In a short space this is joined from the east by two small torrents, the upper named Lakshmipur, the lower Murabahar-Dangra, which in the end of November contains a fine little stream.

Lower down, on the West, the Maur receives a large torrent, the Bamri, which rises towards the boundary of Virbhumi, by two heads.

Some miles lower down the Maur receives from the N. E. a considerable torrent named Deona or Dauna, which about the middle of its course is joined by the Kalachapar, that arises from the hills belonging to the southern tribe of mountaineers.

Lower down the valley of the Maur straightens between the hill called Kulang and those which are situated West from that mountain, both belonging to the southern tribe, and the river for a short way passes through a narrow gap belonging to these miserable people. Immediately on leaving that, it receives from Kulang a small torrent, and, passing a short way through a neglected plain belonging to this district, enters Virbhumi, where it receives from Ranggaliya hill a rivulet named Dhobadaha.

The Singguru rises in the Virbhumi district, and runs East for a considerable way, just within what was stated to me by the Zemindars of this district to be their southern boundary ; but until I have heard what the people of Virbhumi say I have some doubts on the subject. At any rate, as it approaches the Maur it returns into the Virbhumi district, but some miles before it reaches that, a larger river called the Siddhi enters this district from Virbhumi,

and uniting with the Singguru communicates its name to the united channel.

The general remarks that I had occasion to make on the rivers of the districts formerly surveyed are entirely applicable to those of this district, and need not be repeated. I shall here, however, dwell farther than I did in the account of Ronggopur, on the frequent changes of property occasioned by the encroachments of rivers; and what I here say may be applied to the other districts, as well as to this, although the manner in which this district has been managed has rendered the evils resulting from these changes more conspicuous. Among the various pretexts for reducing the revenue to a trifle, that seem to have been adopted on the settlement of this district, and that were yielded to, in what was called a spirit of conciliation, one of the most common seems to have been to write down a large portion of the estate as destroyed by the rivers. This was not only a good excuse for reducing the revenue, but kept open a claim for the lands, which afterwards might be said to have recovered from the injury that they had suffered. Since that time, I understand that several successful attempts have been made to reduce the revenue on a similar pretence, and, as no additional revenue is taken when a river adds new land to an estate, it is evident that under such a system the revenue must suffer a diminution: for, wherever the loss is real, and to an extent considerable with respect to the total size of the estate injured, it is certain that the revenue must be reduced. This however is not perhaps the greatest evil that has arisen from these changes. Scarcely one of them has taken place in this district without having occasioned the most violent and protracted disputes between the proprietors. Had these disputes been merely confined to the proprietors worrying each other, and ruining themselves by the expense of suits, the injury would have been of little importance; but they have in general prevented for many years the cultivation of the new formed land, and such land is remarkably productive. I would most earnestly therefore beg leave to recommend, as a remedy for these evils, that the whole new land, annually recovered from the river, should be taken by the Collector, and divided by him among the various sufferers, especially

such as had met with losses so heavy as would disable them from making good the payments of their revenue; and, that on no account should any deductions from that be allowed ; so that, when any estate was no longer salable, the whole new land, if necessary, should be added to it, until it became a valuable property.

## CHAPTER 3RD.

### LAKES AND MARSHES.

In this district pieces of stagnant water, exclusive of pools in rivers, which in the dry season lose their current, are usually divided into two classes : jhils which contain water throughout the year, and Chaongr which dry up in winter.

Some of the jhils are evidently the old channels of large rivers, which at both ends have lost all communication with the stream, but are so filled with water during the periodical rains, that in spring they do not become dry. In this district, however, such are neither large nor numerous. The principal jhils here are a kind of lakes, that is low lands, which collect a great quantity of rain from floods and torrents, and that never become dry. The most conspicuous of these is Domjala south from Rajmahal, a noble piece of water, the banks of which were intended by Kasemali for the seat of a luxurious retirement. In the rainy season this lake is said to extend about seven miles from East to West, and from three to four miles from North to South. In the dry season it is about four miles long, and from one to one-and-a-half wide, nor does this diminution reduce the beauty of its banks, so much as might be expected ; as it does not leave a fetid mud, or barren sand ; but as the water retires, the banks are cultivated with spring rice.

Between Domjala and Rajmahal is another lake called Ananta Sarabar, which in the floods is of considerable size, but in the dry season is reduced to too small an extent, and is too dirty, and too much overwhelmed with weeds, to be an ornament to the vicinity ; but it is not a nuisance, the land which it leaves being cultivated.

The marsh into which Domjala empties itself, and which runs south from Udhawanala, is of very considerable length; but in general it is narrow, and in most places is so shallow, and so much choked with weeds, that it cannot be with propriety called a lake, except about its middle, where it swells out to a large size, and is called Chandsarjhil. In January this forms a pretty lake.

There are many other jhils, particularly on the North side of the Ganges, but none of them of such a size as to deserve particular notice. The Chaongrs, which in the floods are lakes, but soon after become dry, are of much greater extent, and seem to be on the increase.

One of the most considerable is situated south and west from Mungger, and in the time of Major Rennell would appear to have been a lake. The Zemindars indeed allege that it always was in its present state; but I think this is very doubtful, as they might be naturally afraid of acknowledging an acquisition of such a vast value; for it is said to contain 14000 Bighas customary measure, amounting to about 8700 acres, which every year yield, with scarcely any trouble, a crop of wheat, barley or pease. The change from a lake to a Chaongr is indeed very natural. The violent torrents of this country, and the turbid waters of the Ganges, poured in during floods, leave on stagnation so much sediment as to produce a great effect, and the enormous evaporation soon dries up every thing that is not fed by a perennial stream.

A much more extensive Chaongr is situated South-East from Mungger, extending parallel to the Ganges, from near the rock Dholpahri for at least 12 miles to the east, and being from one to three miles wide. This land is almost totally neglected, and is considered as useless, although the greater part seems exactly similar to that now mentioned as so valuable. Part however is of a poor soil, and part dries up too late for sowing wheat, but would undoubtedly answer for some other crops.

S. E. from Bhagalpur are also two extensive Chaongrs, Elawa and Banggararajor, which are both considered as entirely useless, and left to produce the wild rose (Koyakangta), which they do in luxuriance, a

sure proof of a rich soil. They are however late of becoming dry.

On the north side of the Ganges the Chaongrs occupy a great extent of land, and are considered as totally useless. None of them that I saw are large, but they are very numerous, and scattered in all directions ; and as they do not become dry until January, or even February, they render the country very difficult of access to the traveller. They are everywhere overgrown with the tree called Hijar, and the wild rose, and might, no doubt, produce spring crops of millet ; but perhaps their greatest value will always be for pasture, the moisture, which they retain until spring, enabling them to push out a verdure, which at that season is totally unknown in the neighbouring plains

## CHAPTER 4TH. OF AIR AND WEATHER.

On the weather of this district I have been able to procure no observations made with European accuracy and must therefore depend upon the vague account of the natives.

South winds are very uncommon in this district, in the greater part of which the East and West winds prevail throughout the year ; the former begin about the middle of June, and the latter about the middle of February, so that the east winds last double the time of those from the west; but they blow with less violence. When these winds change, and they are far from being regular, they seldom come from the North, and still more rarely from the South, but change to the opposite point from what usually prevails at the season. This year, 1811, for instance, during the greater part of the season, in which the westerly winds should blow, those from the East have prevailed, and have been very strong. The most usual deviations from this rule are the storms from the N. W., which are very frequent from the middle of March until the middle of May ; but in the eastern part of the district towards Murshedabad there is a much greater deviation; the north wind usually blows from the middle of October to the middle of February, and from thence until the middle of June the regular winds, which are west, frequently change to south, and sometimes to north. These deviations seem to be owing to the influence of the Bhagirathi. The winds are not near so strong, and on the whole much more irregular than in the western parts of the district, where the influence of the Ganges is less disturbed.

The rainy season usually lasts from the middle of June to the middle of October, but in favourable seasons during spring, there are frequent showers, especially with the squalls from the N. W. These are often accompanied by hail, sometimes of a size that would not be safe to mention in Europe by any one who was afraid of being the scoff of the vulgar. All on the South side of the Ganges, if the seasons are favourable, there are between the middle of October and the middle of November one or two heavy falls of rain ; but such rains often fail, and on the North side of the Ganges the farmers think them prejudicial. In December and January there is in some years, as this 1810-11, a good deal of rain, which is highly injurious to the crop of wheat, but improves that of barley.

In the morning there are usually fogs from the middle of December until the middle of February, but this year I did not observe them more than two or three times.

Dews are pretty copious from the end of the rainy season until the middle of April, but gradually diminish as the season advances. The climate on the whole is much drier than that of Dinajpur, and still more than that of Ronggopur. It seems even considerably drier than Puraniya, and the hills of Bhagalpur seem rather to contribute to dryness by the reflection of the sun from the rocks.

The winters, I imagine, are in general less cold than in Puraniya; this one, 1810-11, was very much so, and the natives thought it as severe as usual. They always however at this season sleep by a fire, and suffer much, being very poorly clothed. They often talk of frost (Pala) destroying the crops after strong westerly winds, and one such day was said to have happened this year. I was not up early enough to ascertain whether or not it actually froze, but a little after sunrise I saw no appearance of any such degree of cold. The climate, however, at least on the south side of the Ganges, is favourable for the artificial production of ice, and children from the middle of December to the middle of February frequently amuse themselves by the process. In the evening they boil some water, and

expose it in shallow unglazed earthen pans to the wind. In the morning the pans are found covered with ice. A West wind is as necessary to the process as boiling, and operates by increasing the evaporation, as the West winds here are always uncommonly dry. I presume that the boiling operates in the same way, the sudden attraction of air by the boiled water contributing to that decomposition of its elements, in which the invisible evaporation of water in a great measure, I imagine, consists.

The heats of spring, when the wind is westerly, are very severe, these winds being hot and parchingly dry. In the eastern corner of the district the winds are only hot when they come from the South. In general the East wind is moist and temperate; but in May, 1811, the East winds, which at Mungger blew strong through almost the whole month, were often hot and parching. Towards the autumnal equinox the heat which is moderated by the periodical rains, becomes very severe, owing to the want of wind, but the nights become cool about the middle of October and continue so until August. The hills are nowhere of a height to reduce the temperature of the air in any considerable degree; and the reflection of the sun's rays from their rocks, and the shelter from winds that their forests afford, renders the parts among the hills hotter than the plains; so that the mountaineers, when in the open country, complain much of cold, and the seapoys of that tribe are uncommonly subject to rheumatism.

Thunder in this district, as usual in warm climates, is exceedingly violent and is very frequent, both with the storms of spring and the periodical rains.

Two years ago, in Vaisakh (May-June) was a very great storm of wind from the west, which prevailed all round Mungger, but to what extent I have not been able to ascertain. The storm of 1797 also reached Mungger, but does not seem to have been so violent in Bengal.

## CHAPTER 5TH.

### TOPOGRAPHY OF THE DIVISIONS.

*Preface containing Historical Notices.*

In no part have I found fewer, or more discordant traditions, concerning the history of the country; nor have I anywhere seen people so little interested about this important subject, a knowledge of which seems to be the most effectual of the means by which man is elevated above the brute, and by which his most dangerous prejudices and degrading propensities are most readily counteracted.

It is commonly said, that in this district there are comprehended a part of four ancient countries distinguished in Hindu legend, Angga, Gaur, Mithila, and Magadha.

Angga, according to the most commonly received opinion, and according to the traditions of the inhabitants, is bounded on the East by Gaur, on the North extends to Baidyanath, and on the south to Bhuvaneswar, so that it comprehends the division of Lakardewani, and part of Kalikapur belonging to this district; but I shall not enter into any investigation of its history, as in visiting the small portion of its most remote and rude parts contained in this district, I have procured scarcely any materials, and as at a future period I intend to examine a greater and more improved portion.

In the account which I gave of Puraniya, I have stated, that the whole of Gaur is contained in that district; but here I am informed that I was mistaken, and that the eastern parts of this district, as well as the whole banks of the Bhagirathi from Gaur city to the sea belong to that territory.

I cannot take upon myself to decide whether the people of the Puraniya district, who considered the Ganges as the boundary, or those of this district who allege that they belong to Gaur, are most accurate; nor have I anything new to offer concerning the history of the place.

All the portion of this district that is situated beyond the Ganges belongs to the territory of Mithila, concerning which I can say nothing in addition to what has already been stated in my account of Puraniya, only that this portion would appear to have been annexed to the Muhammedan Kingdom of Bengal by Hoseyn Shah. This induces me to suspect that the Audisah, which in my account of Dinajpur I stated to have been conquered by that prince, was not the province which we call Orixa, the Oriswa of the vulgar, but the Oriswa of the northern parts of Mithila, called Odyssa by D'Anville, as I have mentioned in the account of Puraniya.

There remains only to be mentioned the country called Magadha, a subject, so far as my opportunities of knowledge yet extend, that is involved in some difficulty. In a paper written by Dr. Leyden, that gentleman supposes, if I am correct in quoting from memory, that Magadha is the country of the people whom we call Muggs, a supposition in which I believe he is perfectly singular. The term Mugg, these people assured me, is never used, by either themselves or by the Hindus, except when speaking the jargon commonly called Hindustani by Europeans, and it is totally unknown to the people of Ava; but, whether it is of Moslem, Portuguese, or English origin, I cannot take upon myself to say, many words among the natives being now in use as English, which it is impossible to trace in our, or indeed in any other language. The original country of the Muggs, which is the district of Chatigang, although the name has been extended also to Aracan (Rakhain) is by the Hindus called [blank in MS.]

This opinion therefore occasions little or no difficulty; but it is not clear, in the opinion of some Pandits, whether any portion of this district belongs to Magadha, although in the part of it that is situated west

from Teliyagarhi, the vulgar most usually consider themselves as occupying a portion of that territory.

In the Saktisanggam Tantra, one of those revealed by the god Siva, but to whom I have not learned, is a chapter called Desmala, dividing Bharatkanda or the country then known to the Hindus into 56 Territories. A division into this number seems pretty universal among all the sects and nations of Hindus, and in my account of Mysore I have given a list of the division that is adopted by the Brahmans of the South; but in different parts the division seems to differ greatly, and that contained in the Saktisanggam Tantra, used in Behar, differs very essentially from that of the South, 23 of the divisions mentioned in each list being unnoticed in the other. In the Saktisanggam Tantra it is stated, that Magadha extends from the temple of Vyaseswar Siva on the Vindhyan mountains at the frontier of Gaur, to Vyaskunda, which is on the Karmanassa river. According to this authority the greater portion of this district is in Magadha, as indeed is usually allowed; but in the Vayupuran again, one of these attributed to Vyās, it is said, that Magadha extends from the Karmanasa (Caramnassa R) to the Kilbishi or Kiyul, and from the Gangga to the Vindhyan mountains, in which extent no part of this district, except a small part of Gidhaur, is included.

The oldest traditions current respecting the portion of this district, which is supposed to have been a part of Magadha, and which no doubt at one time belonged to the sovereigns of that country, are, that it was the scene of some of the actions of Ram or Bacchus; but the fables concerning this personage scarcely come within the scope of history, and what is related shall be mentioned in the account of the places of worship that are situated in the division of Munger.

The cosmographies of the Hindus it must be observed have undergone many changes. One which is called Swarodaya, and which is said to be more ancient than that detailed in the Pangchamaskandha of the Sribhagwat, now most commonly current among those who study the Purans, is said to have been originally composed by the god Siva, but was revealed to mankind

by Narapati, a holy man (Muni), whom many Europeans may probably consider as the author; but even he is supposed to have preceded Vyās, the author of the Bhagvat. In this system of cosmography Bharatkhanda, or the country known to the Hindus, is represented as occupying the back and members of a tortoise, in place of occupying the southern corner of Jambudwip, the whole of which, according to the Bhagvat, occupies only the centre of the tortoise's back, the extension of knowledge in the time of Vyās having rendered the old doctrine totally untenable. In the older system a country called Madhyades, or the central territory, occupies the tortoise's back, and is surrounded by eight other divisions, which occupy the head, tail and limbs of the animal, as will appear from the accompanying drawing (No. 2). The northern parts of this district on both sides of the Ganges are generally said to belong to Madhyades, the name by which the people of Nepāla now distinguish the Company's territory, in which indeed a great part of the ancient Madhyades is included, for in the Swarodaya the following provinces of the Madhyades are mentioned—Sangketa, Mithila, Champa (Champānagar near Bhagulpur), Kausambi (towards Dilli), Kausiki, Ahikshetra, Gaya, Bindhya, Antarbeda, Me-khala, and Kanyakubja. It must be remarked, that in this list neither Magadha nor Kikat, said to be an older synonymous term, are used, although Gaya in the centre of Magadha is included. Madhyades was no doubt the country of the author of the Swarodaya, as being placed in his centre of the earth, and it then probably formed a powerful kingdom, or at least the author retained a knowledge of this having once been the case; but now all memory of such a circumstance is extinct among the people here, although it would appear probable that it may have been the kingdom of the Barhadrathas mentioned by Major Wilford in his curious paper on the kings of Magadha (*Asiatick Researches*, Vol. 9), for Puru, the ancestor of that dynasty, is said by the learned Major to have obtained the central parts of India from his father Jajati; but concerning this dynasty, as usual in all investigations of Hindu antiquities, there arises a monstrous difficulty. The 14th in descent from Puru was

## 60 DYNASTIES OF JARASANDHA AND YUDISHTHIR

Jarasandha, who was contemporary with Yudhishtir, and who was succeeded by 22 monarchs of this central and most powerful part of India; but according to the opinion commonly received among the Hindus, Yudhishtir and his descendants were sovereigns of India for many generations. In this district some remains are at present attributed to princes of both dynasties, and in order to reconcile the above mentioned difficulty, I must return to the observation lately made, of the term Magadha not being mentioned in the provinces, which according to the Swarodaya composed Madhyades, although this no doubt included Gaya, that is situated in Magadha. I presume, on this account, that it was the ancestors of Jarasandha who were the sovereigns of India and of Madhyades, and that in this high station they were succeeded by the dynasty of Yudhishtir of Hastinapur, who allowed the descendants of Jarasandha to retain as tributaries a part of their old territory, which then assumed the name of Magadha. Jarasandha, who seems undoubtedly to have been the sovereign of India immediately before Yudhishtir, is commonly indeed called the Raja of Magadha, and Major Wilford says, that he it was who first gave the country that name, it having previously been called Kikat; but I think it not unlikely that the name Magadha was not known until the time of this prince's descendants, who, as I have said, were not probably sovereigns of India, but subordinate chiefs, for high sounding titles, that may occasionally be found connected with their memory, must in India be considered as of very little weight.

The remains supposed to be next in antiquity to those of the dynasties of Jarasandha and Yudhishtir are attributed to a Karna Raja of Magadha; but, as will appear from Major Wilford's account of the kings of Magadha (*Asiatick Researches*, Vol. 9), the number of persons thus named is very considerable, and the eras in which they lived very different, from 13 or 14 centuries before our vulgar era, until 4 or 5 centuries after its commencement. To the above curious treatise I shall refer for more full information on the subject than I can undertake to give. I shall only venture to observe that the table of the kings of Magadha constructed by Major

Wilford, although compiled with wonderful ingenuity from the discordant materials of the Purans, would seem to require much revision and abbreviation, as in order to protract the time the same personages seem to be very frequently repeated. It may be especially remarked, that Major Wilford in one part (*A. R.* Vol. 9. page 105), following the confused nature of his materials, thought that he had identified the six Pala kings mentioned in the inscriptions published in the first volume of the *Asiatick Researches*, with the Andhra kings of the Hihaiaya tribe descended from Sri Karnadeva, who is placed in the third century of our era; yet these Pala kings he afterwards acknowledges (page 203) to have lived at the time of the Muhammedan invasion, and the first of them on good authority is allowed to have lived in the beginning of the 11th century of our era. According indeed to the interpretation of these inscriptions given by Mr. Wilkins and Sir William Jones, by which probably Major Wilford was at first guided, these princes governed about the commencement of our era; but Major Wilford on strong grounds since contends that the era Somvat, which is mentioned in the inscriptions, does not imply the era of Vikrama, as these gentlemen supposed, and an inscription (*A. R.* Vol. 9, page 206) found at Benares ascertains that Sri Deva Pala, mentioned in the other inscriptions, was alive in the year of Vikrama 1083, which according to different hypotheses may be either the year of our Lord 1027 or 1017. I shall therefore consider the eras of the antiquities which I have to describe, and belonging to these two dynasties, as tolerably ascertained. There can be little doubt, I think, that there were at least seven kings of the family of Karna, who were the most powerful Indian princes of their time, who began to reign at no long interval after the destruction of the dynasty of Chandragupta, and whom Major Wilford, by ingeniously tracing them in Chinese history, finds to have enjoyed a most extensive sovereignty until about the middle of the seventh century of the Christian era (*A. R.* Vol. 9, page 112). This dynasty seems to have resided chiefly in this district, and to have rendered Magadha the most eminent province of India.

The family of the Palas also in its inscriptions claims universal dominion, and at the time of the first Muhammedan invasion seems to have possessed at least the greater part of the country watered by the Ganges. The princes of this family seem to have governed from the end of the 10th until the 12th century of the Christian era, when the Moslems seized on the western, and the Bengalese on the eastern parts of their dominions. It is unquestionable that the Pala Rajas were Buddhists, and I think it somewhat probable that the Karnas were of the sect of Jain, as Champanagar, evidently their chief place of residence, still contains traces of that worship, and as they do not appear to be favourites with the followers of the Purans (*Asiatick Researches*, Vol. 9, page 113). In the south of India the Jains boast of having destroyed the Buddhists. Here a contrary course of events seems to have taken place, and Sakya, in the north at least, seems to have restored the doctrine of the Buddhists after its enemies had overwhelmed the followers of his predecessors Gautam.

Between the times of these two dynasties I have met with some traces by which I was a good deal surprised. The country we call Tanjore, south from Madras, in the Sangskrit is called Chola, and in my account of Mysore I have mentioned that the Chola Rajas were powerful princes, and in the South are said to have erected many temples all over India. Several of these I have seen in Karnata, but they are in a style vastly superior to some ruins, attributed to a Raja of Chola, which this district contains. This however may have been owing to the rudeness of the country which did not afford workmen. It is pretended at Baidyanath that Aditya Sen Raja of Chola, and sovereign of the whole country surrounded by the sea, built not only Baidyanath in Virbhumi, but Mandir in this district, as well as other temples in adjacent territories. At Baidyanath it is supposed that this happened in the Satya-yug; but, as I have said in my account of Mysore, the Chola Rajas governed from about the fifth to the seventh centuries of the Christian era. If the Chola Rajas of the south ever extended their dominions here, it must have been in a sudden invasion made by Aditya Sen, who with an army may have traversed India, compelling all the petty Rajas to pay him tribute; and he

may have left behind him some officers who may have retained some part of the country as tributaries, and totally unconnected with their countrymen of the south. In this district the Cholas would now appear to be perfectly extinct. The Rajas of Chola were protectors of Sangkaracharya, and among the first who adopted the doctrines that are now considered as orthodox by the sect of Siva.

The last Hindu prince of consequence, of whom I find any traces, was a Raja Indradyumna, who has left considerable traces in the western parts of the district, and, it is said, in the adjacent parts of Behar, over both of which he is said to have been king, after the Muhammadans had obtained possession of Dilli. Finding himself unable to contend with these ferocious invaders, Indradyumna retired with his army and family to Jagannath. It is universally agreed that the temple there was founded by a prince of this name, but the Brahmans will not allow that a place so distinguished can be of so very modern a date : nor can I take upon myself to say that they are mistaken, but the subject seems to require farther investigation. Whether or not Indradyumna was a person of the family of the Pala Rajas, or a person who on their fall had seized on Magadha I cannot ascertain, but I think that the former is most probable. The Karna Rajas were undoubtedly Andhras, that is, belonged to the country near Hyderabad ; and there is reason to think that the Pala Rajas, although not descended from the royal family, were descended from their servants, and were therefore probably of the same nation. On losing the Gangetic provinces a powerful dynasty still retained the original country of the Andhras, and the ancestors of Pritapa Rudra long governed at Warangol, as I have mentioned in my account of Mysore. I suspect that Indradyumna was the ancestor of Pritapa Rudra, who retired to the ancient dominions of Andhra, and having collected the powerful remnants of an overgrown empire, may have actually founded Jagannath, the vicinity of which no doubt belonged to the Warangol dynasty of Andhra princes. Major Wilford justly observes, that the Andhras, were powerful in the time of Pliny, and they continued in possession of regal authority until the overthrow of Vijayanagar, in the 16th century of the Christian

era, so that among the Bengalese, and even in the mountains of Nepal, Tailangga, one of the names of the Andhras has become the word in common use to signify a soldier. The tradition in this district is, that Indradymna was a Bandawat Rajput. Some allege that the Bandawats are an impure tribe, some of whom still reside in the Ramgar district; while others maintain that the Bandawats are pure Rajputs.

From the time of Indradymna until the English obtained the government of Magadha, the greater part of this district seems to have been in a constant state of anarchy. Some indeed of the original tribes seem never to have been reduced by the Hindu followers of the Brahmans, and many of them seem very lately to have put themselves under the guidance of the sacred order. These rude tribes seem to have always skulked in the hills and woods, rendering a very precarious and irregular obedience to the governors of the plains; while numerous adventurers from the west found a settlement among these rude people, and by superior treachery and ferocity brought them under obedience to themselves, without, in general, rendering the country more settled. Even during the government of Shuja Shah, when the Mogul government was in the highest vigour, and when this prince resided in the district, some part of the plains was subject to petty chiefs that despised his authority. The first considerable eruption from the west was of a tribe called Kshetauris, who subdued the Nat and Bhungiyas, and were succeeded by Rajputs. As several of these tribes remain in possession of estates, I shall, in treating of the landholders, have occasion to give such relations, as I have heard, concerning the progress which these invaders made; and in treating of the different tribes and castes, I shall mention all that I know concerning the less remarkable chiefs who conducted [*sic*] the anarchy to which this wretched territory was so long a prey.

I find no traces of any part of Magadha having belonged to the Hindu kingdom of Bengal: but Hoseyn Shah annexed the whole of it that belongs to this district to the Muhammedan kingdom of Gaur, and secured the richer parts of it by strong fortresses, especially that of Mungger. From this power it would not appear to have

been wrested until the reign of Akbur, from whose time, as I have said, the Moguls enjoyed a nominal authority over the whole, and possessed the banks of the Ganges ; but their government seems to have been constantly disturbed by the invasions and refractory disposition of the chiefs residing in the wilder parts. Mogul officers of rank usually resided at Rajmahal, Bhagalpur and Mungger ; and the former seems to have been a favourite place with the Moslems of rank ever since Shuja Shah, the brother of Aurungzebe, made it the seat of the government of Bengal and Behar.

In Bhagalpur I am told that there were the following Amels or governors, appointed by the Subahs of Bengal. In the reign of Muhammed Shah there were Delazag Khan, Reza Jammun Khan, Rahimdad Khan, Alikulibeg, Amiruddin Khan, Hendali Khan, and Ali-jawed Khan. In the reign of Ahamud Shah there were Alikuli Khan, Bahamun Khan, and Alikuli Khan. In the reign of Alumgir there were Subkhurali Khan, Jafurali Khan, Sayed Mukurem Khan, and Sheykh Fukhuruddin. In the reign of Shah Alum there were Mir Musoudali, Sultan Daud, Waresali Khan, Saduralhuk Khan, and Zaynulabdin Khan, who was succeeded by an English gentleman. These officers in general were of inferior rank to the governors of Puraniya, few of them having been honoured with the title of Nawab. Kasem Ali, on quarrelling with the English, seems to have intended this district as his place of residence. He dwelt for some time at Mungger, was erecting a very great palace at Rajmahal, and intended to secure his independence by a line of fortifications erected at Udhawanala. The forcing this by Major Adams, in 1763, put an end to these visions ; but the turbulence of the chiefs of the interior increased with the utmost violence, and Captains Brooke and Browne were for several years employed in a miserable warfare with these tribes, in which they seldom seem to have been supported by Government, so as to be able to act with that vigour which the case required. Finally Captain Browne, by enormous concessions, induced the discontented to become quiet, and his concessions were confirmed by Mr. Cleveland, the civil officer, who succeeded him in authority over the wilder parts of the district.

The concessions made by Captain Browne, as connected with views of a temporary military nature, were in all probability highly proper, but the vast credit which Mr. Cleveland obtained for adopting them, on what was called a spirit of conciliation, seems to have influenced the gentlemen who had afterwards the management of the district, and has produced a ruinous settlement and establishment, which so far as I can learn, has been very far from conciliating the good will of the natives, and especially of the Zemindars. I have nowhere heard so much complaining, and I have reason to believe that, when Amir Khan penetrated into the Dwab, some of them anxiously wished for his arrival in these parts, and were eager to join him, in order to have an opportunity of murdering the Europeans.

#### SECTION 1.

##### *Division of the Kotwali.*

This is a small division; but perhaps no particular exception can be made to that circumstance, as it includes the capital, where the manners are very dissolute and where there is a great deal of pilfering, so that much attention is required on the part of the police. The situation of the police office is tolerably centrical; but a good deal of inconvenience arises from a part of its jurisdiction being situated beyond the Great Ganges. In wrongs of an ordinary extent the trouble and expense of crossing such a river during the periodical floods would render any attempt to procure redress perfectly ridiculous; and in cases of importance even is attended with exceeding inconvenience to such as are compelled to appear as evidence. This observation is also applicable to several other divisions; but need not be repeated. A projecting corner of this division entirely surrounds a portion of Tarapur, which might with convenience be annexed to this division, as might also the part of Kumurgunj which is surrounded by the Yamuniya, and an island in the Ganges now disputed between Kumurgunj and Lokmanpur. The native officer of police is called Kotwal, but there is no difference between the nature of his office and that of the Darogahs who superintend other divisions.

Strange however to say, his allowances, in place of being more liberal in proportion to the weight of his charge, are smaller than those which these officers receive.

Petty suits are as usual decided by a native officer, and in this district the officers of that description are called by the English name Commissioner. The Moulavi of the Zila court acts as Commissioner both for this division and for the adjoining one of Kodwar, neither of them very extensive.

The Kazi Muhammed Fayek, a person of great respectability for his manners and learning, has an extensive jurisdiction, reaching over the whole of Pergunah Bhagalpur; for in this district, the jurisdictions of the Kazis are not commensurate with those of the officers of police or justice, which is always attended with inconvenience and some of the jurisdictions of the Kazis are of such an enormous extent, as to occasion still greater trouble.

Of the Hindus that have Gurus, 10 parts follow the Dasnami Sannyasis, 4 parts follow the Ramayits, almost 2 parts follow the Brahmans of the Siva or Sakti sects; and a few are followers of Nanak.

In the centre of the district, round the town, the land is high and swelling, and in a few places rises into little hills too steep for the plough; but in general it is excellently cultivated and finely planted. North from the town most of the country is liable to the inundations of the Ganges, but extremely fertile. It is however very bare, and does not look well, the villages being naked. South from the vicinity of the town also the country is very low, and in the rainy season almost impassable, but, except in occasional floods for two or three days at a time, it is not inundated. The soil in many parts is rather poor, but it is well cultivated, finely planted, and would be very beautiful were it not that the huts are wretched, and not concealed from view by fine plants, as is usually done in Bengal. In this division there are no woods, and the plantations consist chiefly of Mangoes, with many Tal and Khajur palms, but scarcely any bamboos.

The houses of the Europeans are more numerous than might be expected from the small society, several of them being unoccupied; and as some of them are

large, and all scattered round the town in very fine and commanding situations, they add very much to the ornament of the vicinity, although none of them have any pretension to architectural merit, and although none of them has the adjacent grounds in good order. The natives have 150 houses of brick, all in a very bad style, and none of them respectable in size.

There is a jail and hospital of brick, neither of which is any ornament to the place. The hospital may indeed be considered as a complete specimen of bad taste. There are many small mosques and other places dedicated to the religion of Muhammed, and built of brick. Although they are all small, and most of them are ruinous, they are in by far the best taste of any such as I have yet seen in the course of this survey. In particular the monument of Ebrahim Hoseyn Khan, at Khunzurpur in the East end of the town, and said to have been built about 150 years ago, is in an excellent taste. It is a square building, roofed by five neat domes, and is built in a style of plain neatness, so that the grace of its proportions is not as usual frittered away in an awkward search after ornament. The natives are not insensible to such merit, and fable that the Nawab, by whom it was built, cut off the hands of the architect, lest he should ever design a rival to this favourite work.

While the kindness or indulgence of Mr. Cleveland, formerly collector of this place was fresh in the recollection of the Zemindars of the district, they erected to his memory a monument of brick, which is a lofty building, placed in a very conspicuous situation. It is kept in excellent repair by the ground-rent of the Magistrate's house, which has been appropriated for the purpose, and at a distance makes a good show, but is in the extremity of bad taste. It consists of a Hindu pyramid, of the most cumbrous rudeness, surrounded by an ill designed Grecian gallery.

A monument of stone, with an inscription highly approving of his conduct, was sent by the Court of Directors from England, and placed in front of the house which the same gentleman had occupied when alive. No pains have been taken to preserve this handsome work,

and wild fig-trees have already fixed their roots in the crevices, and in a few years will demolish the whole.

The town of Bhagalpur, or the abode of refugees, although reckoned to extend two miles in length, and from one mile to half a mile in width, except that it is in a beautiful situation, is a very sorry place. The houses of the Europeans and the Moslem places of worship, as I have said, are great ornaments; but the town consists of scattered market places, meanly built, and owing to the declivities of the ground, very inconveniently situated. Through and round it however there are tolerable roads, and a few trifling bridges. The most compact part is the market place called Shujagunj, in which there are three or four streets closely built. The other market places are Saray, which has also some compact buildings, Yugeswar, Munshurgunj, and Khunzurpur, in which last the courts of law are held and the office of the collector is situated.

No estimate could be procured from the native officers of police concerning the number of houses contained in the town. My people, after examining the whole, think that they may amount to about 5000, but rather more than less, and the alleged importation of commodities from all the vicinity would imply a very considerable population, at least to the rate of six persons for each house. The markets are very badly supplied, and the price of almost everything is enormously high, when compared with that demanded in other parts of the country.

Lakshmigunj and Champanagar may be considered as one town, are exceedingly populous, and tolerably compact. They may contain about 1500 houses, mostly occupied by weavers, who have some religious buildings of brick.

Nathnagar, a little south from Champanagar, is also for this country a good town, containing perhaps 900 houses, and is the residence of traders.

The Papists have at Bhagalpur a small church.

The place of worship that in general is considered as most holy by the Moslems is the brick monument (Durgah) of Mogulana Shahbaz, close by the Thanah. It is by no means remarkable either for size or elegance, but daily offerings are made by the people

of the vicinity, and many strangers frequent it in the month Aswin (September to October). A Fakir has the charge and emoluments, and is called Mozouwor.

The monument (Durgah) of Pir Shah Junggi Shahbaz is larger than the last mentioned place of worship, and enjoys a remarkably fine situation on the top of a small hill about a mile from the office of police; but the buildings are very rude. About 1000 people from the vicinity assemble on the day of the saint, and no less than 20,000 on the day Kurbula, when all the gaudy pageantry, used in celebrating the memory of the grandsons of the prophet, are thrown into a large pond at the bottom of the hill. On both occasions the keeper (Mozouwor) has some profit.

At Champanagar also there is the monument of a saint (Durgah) of some note and great size, for his monument is said to equal his length, and his stature on this authority has been nine cubits. This large size has probably been allowed to the saint from his having been placed at Champanager among the Jin, whose Gods are of very unreasonable dimensions.

At Khulifahbag in the town is a mosque and monument of a saint, said to have been built about 150 years ago by a Huzrut Saiud Mir.

The other most remarkable mosques are at Bhi-khanpur, in the town, built about 400 years ago by Bundugi Shah Neknam; and at Kazichuk, also in the town.

Among the Hindus the chief place of worship is the Ganges. On the full moon in the month Magh, about 25,000 people, of whom 20,000 are strangers, assemble on the banks near Barari, and bathe at what is called Diraghát. Formerly they bathed at Shukkurpur on a Dira, or island in the Ganges; but, this having been carried away, they have retired to the high shores near Barari.

On the last day of the month Bhadra a small assembly (Mela) of five or six thousand people meet at a temple of Bishahari in Champanagar. This assembly was instituted by a celebrated merchant named Chanda, and is called after Behula, his daughter-in-law. In my account of Ronggopur I have mentioned these persons, who are said to have resided at Champanagar, but I

could learn nothing concerning them that would be worth detailing. On this occasion both Bishahari and Behula are objects of worship.

At Yogeswar, in the town, is a small brick temple which was erected by the late Dewan of the Collector; but the Phallus, which is the chief object of worship, has been long there, and is much respected. Only five or six hundred assemble at the Sivaratri or festival of the God, but many daily offerings are made, through a Dasnami Sannyasi who takes the title of Mahanta, who performs worship (Puja) but is not degraded by the name Pujari. He has also an endowment. Besides the temple of Siva, he has three others dedicated to different Gods, and a place for the interment of the Mahantas (Samadhi) all rebuilt by the same person.

The old heretical sect of the Osawals have in this division two remarkable places of worship, remnants, if I am not mistaken, of the religion which prevailed during the government of the Karna Rajas. As the sect is here completely extinct, farther than that one or two attendants on these temples still reside, I shall now state all that I have to say on the subject.

At Bhagalpur I was informed, that at Champa-nagar there was a temple, where the Osawals worshipped Parasnath under the form of the Phallus (Lingga); but on going to the place I found, that this was a mistake, owing probably to the ordinary and natural inclination of my informants to twist everything to their own doctrine. There are two temples of considerable size, built of brick, and covered with plaster, the ornaments on which are very rude. The one has been lately rebuilt, and the other is not yet quite finished, both entirely at the expense of such of the family of Jagat Seth, the banker, as still adhere to the worship of their fathers, although the chief has adopted that of Vishnu. The two buildings are nearly in the same style; they are square, and consist of two stories. In the centre of each story is an apartment, which is surrounded by a narrow open gallery. The upper apartment is covered by a dome. The stairs, which are in the thickness of the wall, are, as usual in native buildings, to the last degree miserable; but the view from the roof is admirable. In the lower apartment

of the temple, that has been finished, are small images of white marble representing the 24 deities of the Jain religion, sitting cross-legged, and exactly resembling the images worshipped by the Buddhists. The images worshipped are not only totally unlike the Lingga; but the temples are not dedicated to Parasnath, as was pretended, but to Vasupuja. The Pujaris are the only people of the sect who reside at Champanagar, and were fat men, totally illiterate: nor could they give me the least account of the history of the place, nor of the sect. Many pilgrims, especially from Marwar in the west of India, are said to frequent these temples.

The other place of worship belonging to the Jain is at Kabirpur, at no great distance from Champanagar. In the neighbourhood it is usually called Vishnu Paduka, or the feet of Vishnu, which the hasty ill informed people, who make the Jain and Buddhists branches of the followers of Vishnu, would no doubt consider as proving their theory; but this is a name given only by the vulgar, and both Brahmans and Jain agree, that the object of worship here represents the feet of the 24 deities of the Jain, which the inscription states to be those of Vasupuja, who was born at Champanagar or Champa-puri. This emblem of the deity is very rudely carved, and represents the human feet. The inscription between the feet mentions the name of the God. That before the toes implies, that it was made by Singheswar Stati, Kundakundacharya Bhattacharya, Kumudachandra Stati, and Dharmachandra Upadesya of the fortunate place Tajapattar, and of the tribe (Jatau) Bagherwal. The date, according to the reading of the Pujari, is in the year of Sambat 694, and of Sak 559; but before each is a mark (१) resembling the Hindu cypher that represents one, which would make the date 1694 of Sambat, and 1559 of Sak, or A.D. 1637. The Pujari asserts that in Jain inscriptions this mark is prefixed to all numbers, and has no value. The inscription on the front of the stone is an exhortation to the believers in the Jains to worship the feet of Vasupuja; but some parts of this inscription, although fairly written, are not understood by the Pandit of the survey, who says that it contains words which seem peculiar to the sect.

The stone formerly was in a small temple; but, when I visited the place, in order to have the building repaired, had been moved to the house of the Pujari. In front of the temple are two hollow columns of brick, with a spiral stair in the centre of each. These are called Manik-asthamba, or in the vulgar dialect Maniktham, which may perhaps throw some light on the history of the pillar, so named, near Dhamdaha in Purniya. One of these columns has apparently inclined from the perpendicular, but both are in good condition. The Pujari says that his father was a Maithila Brahman and a follower of Vyas, to whose doctrine he also adheres; but a woman of great riches, named Yamuna Bai and descended from the original founders, having some years ago came from Karinja in the south, near the sea, settled an endowment on his father to induce him and his descendants to act as Pujaris. On this account they have received instruction from the Jain sufficient to enable them to perform worship, and to satisfy the curiosity of pilgrims. I suspect, however, that they are heretics, who, feeling this title disagreeable, pretend to be followers of Vyas.

I met with no one, who could tell any ancient denomination for the country. Bhagalpur seems to be a name of no considerable antiquity, and is said to have been given by the Mogul officers who collected a number of fugitives, and defended them in the plains from the violence and depredations of the disorderly chiefs of the interior. It formed a part of Serkar Mungger.

The place of most remarkable antiquity according to the Pandit of the mission, is a cave and subterraneous gallery overhanging the Ganges at Mayagunj, a little east from the town. He alleges that this was the abode of Kasyap Muni, the son Kasyap, who was made by Brahma at the creation of man. Kasyap by various wives was father of many of the petty gods (Devatas), besides infidels (Daityas and Asuras), devils (Rakshas), warriors (Danab), monsters (Rahu and Ketu), birds, serpents, etc. Besides this multifarious offspring, many Brahmans, in no manner different from ordinary men, claim a descent from Kasyap, who is also claimed by the

Buddhists as one of the lawgivers of their sect, who preceded Gautam. Without attempting to explain such difficult matters, I must observe, that the peasants in the vicinity of the cave give an account more suited to my capacity. They say, that it was the residence of a hermit, who lived about 150 or 200 years ago, that is some time before they remember: but that, until the English government, the small hills around were covered with thickets, among which no one ventured, as they sheltered thieves and wild beasts. The cave in fact, is very small, and unfit for the father of such a progeny as Kasyap possessed. It has been dug in a dry hard clay containing calcareous concretions. The roof is low, for the pillar, by which it is supported, is not six feet high. Two narrow subterraneous galleries lead from this cave, and are said to terminate, in small chambers, at a considerable distance. About 15 years ago one of these was opened, and in it was found the skeleton of a man, who from the position of the bones, Mr. Glas, the surgeon of the station, then present, supposed to have died in the spot. These circumstances would rather seem to point out the cave as the retreat of a robber than as that of a hermit; although it is not unlikely but that the same person may have united both professions.

Between Champanagar and Bhagalpur is situated Karnagar the chief residence of Karna Raja. The ruin is exactly in the same style with that in Puraniya, which is said to have been the house of Kichak, contemporary with the Karna to whom this work is attributed, that is, it consists of a square rampart, without works, but surrounded by a ditch. There is no cavity within the rampart, the ruins having been sufficient to fill up the whole space, which is still very high. The hill rangers are now cantoned on the ruins, which are finely adapted for the purpose, as they are dry, level, and of abundant extent both for quarters and for a parade. The people in the vicinity pretended to me, that this Karna was the half brother of Yudhishtir by the mother's side, and the style of the ruin is rather favourable to their opinion.

This opinion is also adopted by Major Wilford in his account of the kings of Magadha, (*Asiatick Researches*

Vol. 9, p. 104), and he mentions, that this person taking part with Jarasandha, the opponent of his brother, was rewarded with a small kingdom, called after his own name Karnades, which long continued to be enjoyed by his descendants ; and in one place Major Wilford mentions this as being the Bhagalpur district ; but in others (probably following the discordant tradition of the Hindus) this kingdom of Karna is considered as the same with the Angga or the western parts of Virbhumi : perhaps the kingdom of Karna may have included both territories. All the Brahmans of this district however, that I have consulted concerning this Karna Raja disallow the idea of his being the contemporary of Yudhishthir, and consider him as a prince, who attempted to seize on the throne of Vikrama. As, however, there have been many Vikramas and many Karnas, all usually confounded together by the Brahmans, I shall not pretend to determine the discordant opinions ; I shall only remark, that the princes of Champa named Karna were in all probability of the Jain religion, as Vasupujya the 12th great teacher of that school was born at their capital and as the monuments of that religion are the only ones of note in that vicinity. It must however be allowed, that on the ruin at Karnagar there are two small temples, one of Siva and one of the Parwati, two gods of the Brahmans, and each is provided with a Pujari of the sacred tribe. These in the vicinity, although still tolerably entire, are attributed to Karna. Even allowing to this all due weight, the opinion of the heterodoxy of Karna, which I have mentioned, need not be relinquished, as the Jain admit not only of the existence, but of the worship of all the Devatas of the other Hindus. In the ruin is also said to have been a Yogikunda, where the Raja is said to have kindled a fire when he prayed.

I must also remark, that in digging a tank in the immediate vicinity, the people of Mr. Glas, surgeon to the station, found four small images of brass, of which he allowed me to take drawings, ( see the accompanying drawings ). No. 16 represents Chamunda and No. 17 Mahishmardini, two destructive spirits worshipped by the Brahmans of the north ; but No. 18 and 19 are considered by the Brahmans, whom I have consulted, as

strange gods. On No. 19 is an inscription, which my people have some difficulty in explaining. It is dated after Parsa 925, I presume years after the era of Parsa, probably meaning Parasnath the 23rd teacher of the Jain. It is also dated at Champanagar; but the rest of the inscription, probably in the old Magadha or Pali language, cannot be explained.

For the protection of the vicinity the Moguls had erected two petty forts. One in the town is completely obliterated, and of the other very few traces remain.

#### *SECTION 2d.*

##### *Division of Thanah Ratnagunj.*

This is a jurisdiction of a decent size, and is tolerably compact, except that a long projection is hemmed in between Kodwar on one side, and Fayezellahgunj on the other, and that the latter entirely surrounds a small portion. This should be annexed to the jurisdiction by which it is surrounded, while the projection should be annexed to Kodwar, a jurisdiction that is too small. The boundary also with Tarapur is very irregular, part of each district extending near to the police office of the other. Were the Bilasi made the boundary both the Darogahs would be placed nearer the centres of their respective divisions. Although this is one of the most populous territories in the district, one Commissioner only has been allowed for determining the petty suits of both and the enormous jurisdiction of Bangka. He resides at Nurgunj, nearly midway between the places where the two Darogahs have been stationed; but it is vain to imagine that he can perform the duties which such an amazing extent requires.

The jurisdiction of the Kazi of Bhagalpur extends over this division, where he retains a deputy. He is never employed by those who live on estates that are exempted from paying revenue to government. This is pretty general through the district, the jurisdiction being in general defined by the extent of such and such estates. Those, therefore, who do not belong to such estates consider themselves exempted, and are inclined even to doubt the propriety of interference from the officers of police,

No attention is of course paid to this claim of exemption, but on all lands exempted from revenue the authority of the Kazis seems in general to be entirely set aside.

Of the Hindus who have adopted spiritual guides, 10 parts follow the Dasnami Sannyasis, chiefly vagrants; three parts follow the Brahmans of the Sakti sect; two parts follow the Ramayitis, who are also vagrants; and one part follows Nanak, or are of the Kavirpanth, but these latter are very few in number.

This is a fully occupied and very beautiful country, especially towards the N. W., where there are some rocky hills finely wooded, while the adjacent country is thoroughly cleared, and adorned with numerous plantations, consisting almost entirely of mangoes, intermixed with palms. The villages however are poor, and the wretchedness of the huts is concealed by fences and bushes. There is no lake nor marsh of the least note. Two of the Zemindars have small houses of brick, but there are no buildings that can at all be considered as an ornament to the country.

Amarpur, containing about 200 houses, is the only place in the division that can be called a town.

The Moslems have no place of worship of any note. At the Kurbula, after celebrating the memory of Hoseyn and Hasun, they throw the pageantry into a tank at Banhara, which is said to have been dug by Sultan Shuja, brother of Aurungzebe; and on this occasion about four or five thousand people assemble.

The largest place of worship among the Hindus is a small rude temple built of brick, and situated on the west side of the Chandan river, just where the hill Jethaur-nath descends to its bank. It is dedicated to Siva, and at the festival of the God there is a small assembly.

A Priapus at Dhanakunda, reckoned 14 miles east from the police office has attracted more notice, although it has not been covered with any building. At the annual festival of the great God (Mahadeva) about 5000 people assemble, and the contributions may amount to 1000 rupees, of which the priest, a Rajput, takes one fourth; the remainder goes to the Zemindar.

The usual village deities are Siva, Brahma devata, and Dubebhayharan.

There are no remains of remote antiquity. Between Ratnagunj and Amarpur are the traces of a fort of considerable size, being above a mile wide, in the direction that I crossed ; but it contains no traces of splendour, nor of any considerable strength. It is called Dumariya, and is said to have been in the possession of a chief of the Kshetauri tribe, who refused to submit to Sultan Shuja, and was destroyed by that prince, who afterwards erected near it two buildings, to which he occasionally repaired to hunt. I visited one of these situated at a village called Banhara. It possesses neither great size nor elegance, and consists of a small tank surrounded, without the mound thrown out from the cavity, by a rampart of earth and ditch, so that even near his capital in the very strength of the Mogul government, the king's son was not safe in a hunting party, without a fortification to secure the place of his night's repose. In the day he of course hunted with an army.

The only building within the rampart is a small one of brick, erected at one corner of the tank. It consists of three small rooms with no external opening except one door, and appears to me to have been a mosque, although by the peasantry it is called a throne (Tukht). Over the door is an inscription in the Toghra character, which no person in my company nor in the vicinity could read.

#### SECTION 3d.

##### *Division under Thanah Kodwar.*

The village from which the division derives its name is large, and its situation is remarkably fine and centrical. Why it has not been chosen for the residence of the officer of police I cannot say ; but his office is situated about a mile distant in a wretched low place, where there is not a hut. The division, although populous for its size, is too small. It would be tolerably compact were not two detached portions surrounded by Fayedullahgunj,

The Moulavi of the Zila court acts as Commissioner for this division as well as for that of the Kotwali, from which no material injury arises, as both united are of a

very moderate size; but Bhagalpur is by no means centrical.

There are two Kazis, as part of the division belongs to Pergunah Bhagalpur and part to Kahalgang. Neither resides, but each has appointed a deputy.

Of the Hindus, who receive spiritual instruction, one part is under the Ramayits, none of whom reside; two parts follow the Brahmans of the Sakti sect; ten parts follow the Dasnami Sannyasis; one part follows the disciples of Nanak; 100 families belong to the Kavirpanth.

The division consists of three parts, the first low land surrounded by the Ganges, or near its bank, tolerably well cultivated, but very bare; this occupies the northern parts. Secondly, the central parts which are fine high swelling land, remarkably well occupied, and finely planted with mangoes, but few palms or bamboos, yet still very beautiful. Thirdly, the southern parts are naked plains, in some places low and flooded during the rains; much neglected and very dismal, much of them being overgrown with stunted trees and thickets of prickly bushes, but abounding in game, and very favourable for the chase. Near the Thanah are two small Jhils or lakes, that contain water throughout the whole year. In this division there is no brick house nor temple.

Colonel Hutchinson, who once had the charge of the invalids in this district, built here a small brick inn for the accommodation of native travellers. It is a pitiful looking place, not in the best order, and the people for whom it was intended seem to prefer straw huts.

Kodwar, although a small town containing about 200 houses, has neither shop nor market.

The only other place in the division that can be called a town is Soulutgunj, a little east from the Thanah. It is about the same size with Kodwar.

The Moslems chiefly worship at a wretched monument ( Durgah ), sacred to Huzrut Makhdum Shah situated at Purani in the S. W. corner of the division. The keeper has an endowment, and about a thousand people annually assemble to celebrate the day of the saint.

The chief worship of the Hindus is directed to bathe in the Ganges at the three usual times ; but in this division there is no peculiar place that is distinguished for its holiness. At Uday-Rampur is a Priapus named Burhanath, which has some reputation in the neighbourhood, and perhaps 500 people assemble at the festival of the God. It belongs to the priest of Pateswarnath in Fayezillaqunj, who has some land for its support, and is entitled to some dues. Living at a distance, he has appointed a Dasnami Sannyasi to perform the duties, and allows him a very slender subsistence.

The most common deities of the villages are Bishhari Dubebhayharan, and Babu Ray. Their priests called Kaphris have endowments in land, but are all Sudras.

The people allege, that this division is in Magadha, and that it belonged to Jarasandha. It is included in Serkar Munger of the Mogul province of Behar.

At Ratnitikar, south from the Thanah about six miles, are the ruins of a small fort said to have belonged to a Kshetauri chief, but the people have forgotten his history and name.

At a place called Kaja, about ten miles S. E. from the office of police, Sultan Shuja is said to have had a hunting seat, now entirely gone to ruin. He also built a column of brick ( Munarah ) at Tarehha, S. W. four coses, which is still pretty entire but is no great work. His hunting seat was near a small fort built by a Shekurali Khan, and this was the residence of a military officer ( Foujdar ) who was employed to protect or overawe the Zemindars of Barkop, Parsanda, and Nayades.

Sufigar was another small fort, but the founder is not known.

#### SECTION 4<sup>th</sup>.

##### *Division under Thanah Lokmanpur.*

This is a large and tolerably populous division of a very irregular inconvenient shape, and the residence of the officers of police and law were never settled at Lokmanpur, which is near the centre of their jurisdiction, but has been fixed at Bikipur towards the S. W. corner

Parts of Kotwali and Fayezillahgunj are either entirely surrounded by this division, or are hemmed in between it and the great Ganges; and its boundary with Kumurgunj is ill-defined and keenly disputed. The boundary with Puraniya has never been settled so as to stop the clashing of contested jurisdictions.

The jurisdiction of the Kazi is coequal with that of the officer of police, and he usually resides at the same place, although he occasionally visits his family at Darbhanga.

Of the Hindus who have spiritual guides, two parts follow the Ramayits, of whom there are six Akharas; six parts are under Dasnami Sannyasis, of whom ten reside but are annoyed by interlopers; six parts are under Brahmans of the Sakti sect, who mostly reside, and one part follows the disciples of Nanak, who have three Sanggats. Although there is a good deal of marshy land, there is no one marsh of any considerable size. The country may be divided into four parts : 1st.—a narrow space near the banks of the Ganges, bare, but tolerably occupied; 2dly,—a very fine populous well occupied tract, beautifully planted with mangoes intermixed with some bamboos and a few palms, and extending from the above to the Tilyuga, 3d,—a very low, dismal, neglected country, on both sides of the Ghagri, some of it overgrown with thickets of stunted trees and bushes, or with reeds and coarse grass; and 4th,—a higher and better cultivated tract towards the North, of rather a poor soil, but well planted, mostly however with mangoes alone, and productive chiefly of rice.

The chief Zemindar has in his premises a ruinous brick house, very unsuitable to the extent and value of his estate. There are besides four halls (Dalans) and four temples of the same material, belonging to men who have forsaken the splendour of the world.

Bihipur, the residence of the Darogah Commissioner and Kazi, is a large scattered place, containing about 300 houses, four of them brick, and carries on some trade. Besides there are the following small towns: Madhurapur contains about 400 houses, Krishnagunj 150 houses, Chorhanda 100 houses, Bhawanipur 150 houses, Pangchgachhiya 100 houses, Sibgunj

250 houses, and a subordinate factory belonging to the agent for supplying saltpetre. The above places have weekly markets. Alumnagar has no market, but contains above 200 houses.

Pergunah Chhai, which constitutes almost the whole of this division, is called the country (Velayet) of a certain Muhammadan saint named Shah Mangun Auliya, who has an endowment in land, and receives annually one rupee, and one *man* of grain from each village in his territory, and 15 anas a month from government. The monument, near the police office, is by no means worthy of such a personage to whom persons of both religions, when afraid, make frequent offerings; but no great assembly celebrates his memory. The profits are shared between a servant (Khadem) and three doorkeepers (Mozouwar).

Another holy man, named Pahar Khan, was held in such reputation that, the people disputing about his corpse, it was divided into three parts, and buried at different places, at each of which was a monument of brick, and a small endowment. Care has been taken to preserve the latter, but the monuments have gone to ruin. Many offerings are made, but there is no great assembly.

The chief place of Hindu worship is Sibgunj-ghat, on the Ganges, where from 25 to 30,000 people assemble annually, on the full moon of Magh, to bathe. At the full moons of Vaisakh and Kartik 5 or 6,000 assemble at the same place.

The only image of celebrity is a Priapus near Bihipur, which is called Bhojeswarnath. It belongs to a Dasnami Sannyasi, and is supposed to have come of itself. About 1000 people worship on the festival of the God. The temples of brick, being built by men, have acquired no sort of celebrity, although the owners have taken the vow of abstinence from pleasure.

Bishahari is the most common deity of the villages. Her Kaphris or priests are of all castes, except Brahmans and Kayasthas. Bisurawat, a milkman of great sanctity, by the people of his own trade, who are here very numerous, has been elevated to the rank of a petty god of the villages.

This is universally admitted to belong to Mithilades, and in the Mogul government formed a part of Serkar Mungger in the province of Behar. About 300 years ago it is said to have belonged to the Bhawar, whom I have mentioned in the account of Puraniya, as being possessed of the northern parts of Mithila. Raja Phulbarish of this low tribe resided at Phulawat, where some slight remains of his works may be traced. At Kuran in the N. W. part of the division he had also a fortress.

#### SECTION 5th.

##### *Division under Thanah Gogri.*

This is a monstrous overgrown jurisdiction, and the native officers of police and law reside at the town from which the division derives its name, close to the frontier of Mungger, which has never been well ascertained.

The Kazi of the greater part resides also at Gogri, but a part is under the authority of the Kazi of Kharakpur, who lives far beyond the Ganges, and keeps no deputy.

Like the last division, this consists of four parts, a narrow tract near the Ganges bare, but tolerably cultivated, except where the squabbles of contending landlords have prevented the granting of leases; a rich finely planted part bounding the former on the north, but less ornamented with bamboos than the similar portion of Lokmanpur; a low neglected dismal portion on the banks of the Ghagri here very extensive, and more overrun with stunted woods and thickets; and finally high rice grounds, towards the north, rather poor, but well planted, almost entirely with mangoes.

In this vast extent are only two wretched houses of brick, one of them ruinous. There is one neat but small mosque belonging to the Kazi. Gogri the capital, has much the resemblance of a Bengal village, being buried in fine groves of trees, and the houses being concealed by hedges; but it scarcely contains 100 houses, Rasulpur, Raghunathgunj, and Setonabad are about the same size.

The Moslems have no place of worship that is in considerable repute. An attempt has been made to place a certain saint, Shah Bahadur Shahi, on a footing of equality

with his neighbour of Chhai, but although the extensive Pergunah of Pharkiya is called his Velayet, he receives no advantage from this title and his monument is but poorly endowed, and little frequented.

Madepur Ghat is a place on the Ganges, where a great many bathe on the three appointed full moons, especially in Magh ; but many other places dispute its pre-eminence, so that no vast multitude assembles at any one of them. Bishahari is the most common village deity, and always has a priest called a Kaphri, some of whom have lands. In one place Mahamaya has this honour, and her place of worship is very much frequented. The low tribe of Musahar have deified Hira and his wife Kama, two of their own tribe ; and the worship of Bhimsen, Sales and Rahu, so prevalent in the other parts of Mithila, extends also to this frontier.

This is universally allowed to be in Mithilades, and in the Mogul government formed a part of Serkar Munger, in the province of Behar. In the reign of Hoseyn Shah it seems to have been annexed to the kingdom of Bengal. This prince built at Gogri, a Mosque not very remarkable for its size, but encrusted with carved tiles ; and it is the only Mosque in that style, which I have seen. It has no endowment and has become ruinous. According to an inscription over the door, it was built in the year of the Hijri 920.

This country seems always to have been in a very rude state, and the only remains of antiquity, except the mosques, are a few petty fortresses, probably of a more recent date. Chandalgar was the residence of a Raja of that low tribe, to whom part of Pharkiya belonged. Bhawardihi is another fortress that was the abode of a chief of the low tribe Bhawar, to whom Bahorsaha belonged. Mahadipur, another petty fort belonged to a Goyala, the former owner of Sehzari. These low chiefs were destroyed by a colony of Rajputs, who still hold much of the country, as will be related when I come to treat of their possessions. They built several petty forts to protect themselves from each other, from the Chakoyars, a tribe of predatory Brahmans in Tirahut, and from the authority of the Moguls, for the country continued in a complete state of anarchy, until some time after the

commencement of the government of Mr. Hastings. The Mogul officers also erected some forts ; but the whole are trifling, and unworthy of particular description. During these disturbances, besides petty cuttings of throats innumerable, 10 or 12 battles of some note took place ; and at each a Durgah, dedicated to some Moslem saint, was erected over the slain of both parties, whether Moslems or pagans. These monuments are called Gunj-sahid, and have trifling endowments.

#### *SECTION 6th.*

##### *Division under Thanah Kumurgunj.*

Although Kumurgunj is the usual manner in which the name of this division is written, yet its proper name is said to be Kangwargunj, deriving its name from the Kangwar, or pots suspended from a pole, that are used for carrying water in pilgrimages. It consists of a miserable long narrow strip of land, very badly cultivated, extending along the bank of the Ganges, and having its boundary with Lokmanpur totally undefined. The eastern corner, including the disputed parts, as I have stated, might with advantage be annexed to the Kotwali, while the remainder might be annexed to the enormous adjacent jurisdiction of Tarapur, and the two might then be formed into two jurisdictions of a reasonable size, of which Arjusgunj and Gauripur might be made the capitals. At present the Commissioner for both divisions resides in the former place, which may be five miles from the northern boundary of his jurisdiction, and above 30 from the southern.

The jurisdiction of the Kazi is divided between three persons, the Kazis of Kharakpur, Bhagalpur, and Kahalgang, none of whom reside. The first has appointed a deputy, who resides in Sultangunj, at one corner of the district. The two latter have agreed to employ one deputy, who farms the profits of the latter at five rupees a year, but pays nothing to the former, who as I have said is a man of high respectability.

Of the Hindus that have adopted spiritual guides, who do not exceed one half of the whole, 21 parts follow the Brahmans of the Sakti or Siva sect ; 21 parts the

Dasnami Sannayasis, chiefly the Mahanta of the conven on the rock in the Ganges ; 4 parts follow vagrant Rama-yits, who come here occasionally ; and 18 parts follow the disciples of Nanak, all of whom also are vagrants.

At the east end, some part of the division consists of low lands surrounded by the Ganges. At the west end are some hills and rocks finely wooded, and at their bottom some high rice land ; but the great part of the jurisdiction consists of two long narrow lands running parallel to the Ganges, and of very different descriptions. That next the river is high, and consists of a strong red clay, containing in some places calcareous concretions. This is very fully occupied, and most beautifully planted with mango trees intermixed with a great many Tal and Khajur palms ; but this is very narrow. The interior is very low, overwhelmed in the rainy season by water, and in the dry it becomes bare and dismal, and is almost totally neglected.

Two brick houses belong to natives, and there are two religious buildings, that are some ornament to the country ; more however from the fineness of their situation, than from any elegance or grandeur that they possess. The villages are not concealed by plantations, so that the wretchedness of the huts is fully displayed.

The largest place is Sultangunj, where there are about 250 houses, and a good deal of trade. Two of the houses are built of brick, and three are tiled. Next to Sultangunj in size is Chichraun, a town of invalids, containing about 220 houses.

The only other place that can be called a town is Kumurgunj, which may contain 100 houses.

Among the Moslems, the place of worship of by far the greatest celebrity is the monument of a saint called Baiskaran, situated on a hill that overhangs the Ganges at Sultangunj, and where the sacred stream is considered by the Hindus as uncommonly efficacious in prayer. According to the Keeper (Khadem), who boasts of a descent from the saint, this personage came from the west with 2 holy companions, and sat down on the hill called Kherahi, which is some miles south. Baiskaran having learned, that the hill near Sultangunj was in possession of a Kanphatti Yogi, highly venerated among the heathen

for his sanctity, went to the place, in order to demonstrate the vanity of the Pagan. The two worthies, in disputing concerning the respective value of their doctrines, ventured to challenge each other to a proof of their veracity by the dangerous trial of miraculous authority. On this the seat of the Yogi, by the power called Gotika prakas, which many holy men are thought to possess, and which the keeper does not dispute, began to mount, and had raised its owner some hundred feet into the air ; when the saint waxed wroth, and prayed to God, who smote the pagan, so that he fell to the ground and perished. The neighbouring Hindu chiefs, hearing of the disaster, assembled, and were advancing to punish the saint, who had taken possession of their holy place; but, before they could reach the hill, the whole multitude were struck blind, except one old man, who, being penitent, came to the saint, and solicited forgiveness, which was granted, and sight restored to even the infidels. The chiefs then settled on the saint some lands, which his descendant still enjoys. This story seems to be swallowed by the Hindus just as easily as by the faithful, nor do they seem to think, that any such proofs of extraordinary power form any reason for their deserting the religion of their fathers. After this the saint built a small mosque on the top of the hill, and adjoining to it a dark chamber or dungeon called Hejrah. In this he remained 40 days and 40 nights without tasting food or drink, a religious exercise which is considered by the Muhammedans here as very acceptable to God, and one would suppose to be thought rather common, as a peculiar word (Chillah) is said to have been adopted to express it. East from this chamber the saint and several of his successors, the servants (Khadems) of the Mosque, have been buried. In the area where the graves are, is a slab of stone, on which the saint was wont to kneel when he prayed. On this his descendant showed me a small mark, surrounded by a red stain, and said that many years ago an European gentleman struck the stone with a spear, when immediately blood flowed from the part, and has left an indelible stain. The mosque is still in tolerable order, but the buildings which formerly were occupied by the descendants of the saint, have become entirely ruinous, and the present possessor occupies a

thatched house below, suitable to the reduced emoluments of his office. Both Hindus and Muhammadans still continue, when in distress, to make occasional offerings, but at the two holidays named Id and Bakurid not above 50 or 100 of the faithful assemble.

Near the Thanah Pir Sadi Bahadur has a monument of earth, and the keeper has an endowment in land, while all those in the vicinity who have occasion for the assistance of a saint make offerings.

The place of worship by far most frequented by the Hindus is the bank of the Ganges, immediately above the hill occupied by the mosque of Baiskaran, and opposite to a rock in the middle of the river occupied by a temple of the Gaibinath Priapus. Such places where the sacred river washes the rock are called Sila sanggam, or the union with stone; but that is not assigned as the reason for the peculiar holiness of the place. This is owing to the river in this part running from the South towards the North. Wherever this happens the river is no doubt reckoned peculiarly holy, and is called Uttarbahini. The actual reason of the preference given to such parts of the sacred river is, perhaps, that they are not common, as the general course of the river is towards the south, but in this district I usually find it attributed to a very different reason. It is commonly said, that at these places the god Siva took such liberties with the frail nymph of the river as might be expected from his indecent form. Of the three holy places called Uttarbahini in this district, this is by far the most frequented, and yet the circumstance of the river running towards the north is by no means well defined, while at the other two it is very remarkable. Farther it must be observed, that the Hindus have no native appellation for the place, but universally call it Sultangunj, a Persian, or rather an Arabic word. These circumstances induce me to suppose that the celebrity of the place has arisen from some old religion that has now become heretical, and which has been celebrated on the two adjacent rocks that are covered with figures in Bas relieveo, totally unconnected with the religious places that are now in possession, one being sacred to Siva and the other to Muhammed. It is indeed said that Jahnu Muni of Gaur, who one day swallowed the Ganges, as I have

mentioned in my account of Puraniya, had here a house (Asram); but this is a story rather apocryphal, and seems rather to relate to the personification of a natural change in the course of the river, than to any event in the course of human affairs. Whatever may be the cause, 18 families of Brahmans, containing perhaps 50 adult males, live by officiating as the priests (Pandas), who perform the ceremonies practised by those that bathe. At the three usual full moons, from twenty to thirty thousand persons may in all attend to bathe, but the great emolument of the priests arises from about 50,000 pilgrims who at various times come to carry away a load of water which they intend to pour on the head of various celebrated images in distant parts. In the south of India I have met pilgrims carrying their load from this place, but by far the greater part goes to Devghar in Virbhumi, where it is poured on the Priapus or Lingga called Baidyanath, to whom this water, taken from a scene of former pleasure, is considered as peculiarly acceptable.

West from the Thanah about four miles, at a place called Kumarpur, is a Lingga called Siddhanath, which was endowed by a Kshetauri chief, whose name has fallen into oblivion. The land is enjoyed by a Dasnami Sannyasi, but the building is trifling, and the image attracts little notice, although a few assemble at the festival of the God.

The only temple now of any note is that on the rock which is surrounded by the Ganges and is placed opposite to Sultangunj. This rock seeming to me connected with the principal antiquities of the place, I shall proceed to treat of them in common. A little west from Sultangunj is a square elevation called Karnagar, which exactly resembles that at Champanagar called by the same name, but is not so large. Some traces of the brick wall by which the outer side was faced are still observable, and it is said that a good deal remained pretty entire until it was pulled down by Colonel Hutchinson to erect a set of indigo works. There is no cavity within, the whole being filled with rubbish and bricks, and the dwelling house belonging to the indigo works is placed on a very fine situation in the centre. It is said in the vicinity that the monument of a Muhammedan saint was destroyed to make room for this house; but I look upon this as one of the pieces of

scandal so commonly propagated by the people of this district to vilify the English character, as I have in general heard the natives speak of the gentleman in question with great respect. The size of Karnagar is not considerable. It appeared to me in riding over it to contain five or six acres, but the natives say that it contains about 25 bigahs, which is between 12 and 13 acres, and this may very likely be more accurate than my conjecture. The people whom I consulted considered the Karna Raja, to whom this palace belonged, as the same with the Karna Raja who dwelt at Champanagar near Bhagalpur, and the style of both the ruins is exactly the same. Major Wilford, however, considers these Karnas as perfectly different (*Asiatick Researches*, Vol. 9, page 108), and in the table of the kings of Magadha, he makes the owner of the palace near Sultangunj or Sri Karnadeva to have reigned in the 3rd century of the Christian era, while he makes the Karna of Champanagar to have been contemporary with Jarasandha, first king of Magadha, in the 14th century before the birth of our Saviour. The former Karna he considers as king of all India, the latter as a petty chief of Bhagalpur: yet, as I have said, the ruins attributed to the chief are much more extensive than these attributed to the monarch of India.

This Karna, the great king, according to Major Wilford, was an usurper, and confined his predecessor on the rock near his palace, that is surrounded by the Ganges, which I shall now proceed to describe. It is a very rugged mass of granite, separated from another hill of the same materials, now belonging to the Muhammedan saint, by a branch of the Ganges, perhaps 400 yards wide. The summit is occupied by the temple of Siva called Gaabinath, surrounded by the buildings of a convent of Dasnami Sannyasis. These buildings are in good repair, and from their noble situation look well from a distance; but on a near approach I found them the most misshapen and rude mass that I have ever beheld. According to tradition, Harinath, a very holy person, who had forsaken the pleasures of the world (Sannyasi), took up his abode on the rock. This person was at vast trouble in making pilgrimages to Baidyanath, until at length the God informed him in a dream that he would have no farther

occasion to come so far, as on his return to the island he would find an image, to which he might address his prayers. This accordingly happened, and Harinath became the Mahanta, or head of a convent of Sannyasis, who took up their abode at the temple of the image, a Priapus called Gaibinath. This could not have been in a remote period, as Digambar the present Mahanta says that he is the thirteenth person who has enjoyed the dignity, to which no young man can hope to aspire. The place does not seem to have risen into great reputation until lately, as Ananta, the last Mahanta, is said to have erected most of the buildings that now stand. Almost every person that comes to bathe at Sultangunj, on the three full moons, visits the temple of Gaibinath, carries up a pot of water, and pours it over the image. At the festival of the God a good many perform this ceremony, but in order to render it more efficacious, such as have strength of head and limbs, carry the water to the summit of the spire, and dash it from thence on the image. This however is a work to which many cannot pretend, as the spire is lofty, and the ascent to it is by ladders of a very tremendous appearance. The Mahanta acknowledges no Guru nor superior, and was born in the family of a Brahman of Kharakpur; but he has given up all the insignia of the sacred order. He has about twenty disciples, and the community has five or six servants. In the rainy season they have little or no communication with the continent, the stream then rushing past with a violence that renders the approach dangerous; but a large proportion of the neighbouring Hindus in the fair weather receive instruction from the convent; while most of those who frequent Sultangunj to bathe at the three regular full moons, all in the fair season, all those who visit the temple at the festival of the God, and almost every Hindu of note who passes up or down the river in fair weather make offerings, which enable the Mahanta to lay up stores amply sufficient to supply the few wants of his disciples, who appear to be very poor creatures living in a state of listless mortification. The Mahanta fairly said, that the community was possessed of no knowledge but the art of begging, and that the utmost stretch of its science is to be able to read some forms of prayer which no one of them

understands. They deny all knowledge of the state of their island previous to the arrival of their first Mahanta; yet it is evident that the place had previously been dedicated to religion. Below the buildings of the Sannyasis is a small temple dedicated to Parasnath, the 23rd teacher of the sect of Jains. The Sannyasis say, that Baidyanath has given orders that the Jain should no longer worship on his sacred rock, which is as much as to say that they, as his servants, have put a stop to this heretical practice. Some Jains however, I am told, still come privately to the place. The temple of this sect, now standing, seems evidently to be a very modern work, the authority of the Sannyasis having probably been unable until lately to expel the heretics. There are however on the rocks a great many figures in Bas relief, and some of them seem to be of very great antiquity, as being much worn, although carved on such durable materials. These carvings represent various personages received by all sects of Hindus as distinguished beings, among which I observed Parasuram, Narayan and Lakshmi, Ananta sleeping on a snake, with the goose of Brahma flying over him, Krishna and Radha, Narasingha, Ganes, Hanuman, and Siva; but I observed also a Jineswar, which I believe is never to be found in any place dedicated to the worship of the Hindus now reckoned orthodox.

The hill on the continent now in possession of the Muhammedan saint, has also at one time belonged to the Hindu worship, and numerous figures are carved on its granite, exactly in the same style with those on the rocks of the island. The most remarkable that I observed was a Priapus (Lingga) supported by nymphs (Nayikas) and a female in a reclining posture surrounded by human heads, and said to represent a female devil (Rakshasi) surrounded by the heads of her daughters. The figures on both hills I refer, with little hesitation, to the era of the Karna Rajas.

The most common Grama devata in this division is Bishahari, but Rahu and Sales seem to have made their way from Mithila, across the Ganges.

This is generally allowed, among the inhabitants, to belong to Madhyades, and few will acknowledge that it

formed a part of Magadha. In the Mogul government it formed a part of Serkar Munger in the province of Behar.

#### *SECTION 7th.*

##### *Division under Thanah Batemangunj, or Haveli Munger*

This is a very small division, but being remarkably well occupied, and containing a pretty large town, it is populous so that it no doubt requires all the vigilance of a Darogah, and all the attention of a Commissioner. A considerable portion of it is, however, situated beyond the great channel of the Ganges, and ought to be annexed to the jurisdictions on that side of the river; while two remote narrow corners of Mallepur and Kumurgunj come close upon Munger, and should be placed under the care of its officers. The official designation of the Thanah is Batemangunj, a word compounded of English and Persian, and derived from the name of a Mr. Bateman, who was Collector of the district; but the office of police is not in that market place; it is in the adjacent part of the town of Munger called Shadipur, or place of marriage. The size of the town will always render it proper that the native officers should reside in it, although by making the principal stream of the Ganges the boundary, it must be at one side of its jurisdiction; but even with the additions which I have proposed, its size would be so moderate that the distance would not be inconvenient. The Commissioner resides near the office of police.

The Kazi of Munger has a very extensive jurisdiction, extending over all Munger and Kharakpur, some parts of which are above ninety miles from his place of residence, which is at Munger; of course, almost the whole of his duty is performed by deputy, which considering its nature seems highly improper.

Of the Hindus, who have spiritual guides, and who form ten sixteenths parts of the whole, two of these parts follow the Brahmans of the Sakti sect, chiefly resident; four parts follow the Dasnami Sannyasis, of whom there are four convents, the chiefs of which are not married,

yet several vagrants intrude; 3½ parts follow the disciples of Nanak, who are all married and reside; and a half part follows the Ramayits. There are a few of the Aghor and Kavirpanths, but so few that no estimate can be given in proportional parts.

A little west from Sitakunda is a lake, which at all times retains a little water; but in the dry season does not look well, as its banks are dirty. In the rainy season it is a very fine object, as it is surrounded by hills, woods and rocks. The fort of Munger itself is situated on a rocky eminence, and all towards the East and South the district, although finely cultivated, contains many rocks, in some parts rising into little hills, and, being finely planted, is perhaps one of the most beautiful parts in India. The plantations however consist chiefly of mangoes and palms and are not ornamented with bamboos. On the most considerable of the hills, in a grove, is the monument of a Muhammedan saint, and near it is the house of an European, that are great ornaments to the country, as is also the house of the Commandant of the garrison, which is by far the handsomest building that I have seen in the course of my survey. The western part of the division is level, and rather too low to be well planted; but in spring it looks very rich, being then covered with one uninterrupted sheet of wheat and barley. The parts surrounded by the Ganges, and beyond it, are very low and bare, and in some places rather dismal, owing to disputes between the proprietors, which have prevented cultivation. Besides the houses of Europeans the natives have 210 dwellings of brick, which together with several ruins and the fort, add much to the ornament of the country. There are in the vicinity of the fort a good many small bridges of brick, made I believe by Europeans, and in good repair, and these, exclusive of the necessary storehouses in the fort, some of which are good and very neat, are the only public buildings worth notice.

Munger is a town of some note and great size, but as usual by no means populous in proportion to its dimensions. It consists of sixteen different markets scattered over a space about 1½ mile long from N. to S. and 1 mile wide. The only two parts in this extent that

are close built, or resemble a town, are without the eastern and southern gates of the fort: at each is a street so wide as to admit carriages to pass, and closely built with a good many brick houses. Besides these market places, between the river and the northern gate of the fort is a suburb, which may be considered as the port, but it is chiefly built on the sands of the Ganges, and every year during the floods many of the houses must be removed. No enumeration of the inhabitants has been taken. The native officer of police thinks that in the whole there may be 7000 houses, but my native assistants are not willing to allow much more than a half of that number, or 3600 houses. Their opinion is founded on a careful inquiry from the people of each market; and although it is probable that the numbers may have designedly been underrated, yet they are, perhaps, nearer the truth than the native officer of police, who speaks merely by a random estimation. I do not think that by any means the population can be extended beyond 5000 houses. These, though very small when compared with the houses in European cities, are full of inhabitants; for six persons, I am told, may on an average be allowed for each. This would give a population of 30,000 persons, the whole charge of whose conduct, with that of a populous district, is entrusted to one man, who is allowed 25 rupees a month, and who, in his manners and education, is scarcely fit to be a gentleman's butler.

The place of worship in most repute among the Moslems here is the monument of Pir Shah Hoseyn Lohari, who is said to have come from the west about 300 years ago, and to have placed himself as a pupil under a saint of Bhagalpur named Pir Shah Bundugi Sultan, of whom I did not hear in that place, saints here like prophets in other countries, being often neglected at home. The pupil, after undergoing proper instruction and trial, was detached to a hill near Mungger, that has been already mentioned, and which is now called Pir Pahari (the saint's hill) from his having resided on it for fifty years. He had an endowment of fifty bigahs, which is now enjoyed by the person who attends his tomb. There is no great assembly, but both Hindus and Moslems make frequent offerings especially at their

marriages, and in times of danger. The offerings are usually cakes of flour and esculent vegetables, with a few cowries or copper coins.

Near the office of police is the monument of Aladad Arfin, another pupil of the same saint of Bhagalpur. There is an endowment of forty bigahs, which are said to have been given for supporting a hospitable building, but no such thing exists. The person, however, who attends the tomb and enjoys the land and offerings, accommodates strangers in his house.

On the walls of the fort, at the gate leading to Patna is the monument of Shah Nufa. The monument has been lately whitewashed, and the keeper has a small endowment, but the saint receives few offerings, although the keeper watches the gate with great vigilance, and allows no passenger to escape [without] solicitation.

The chief place of Hindu worship is commonly called the Kashtaharani or Katghari Utrabahini. I have already explained the meaning of Utrabahini to be a part of the Ganges, where its stream runs towards the north, and this one, although not so celebrated as that near Sultan-gunj, has been distinguished in the language of the Gods by the name Kashtaharani, the remover of misery; but among men it is called Katghari, or wooden house, from a building that was near the descent, where people bathed. In some books however, this place is called Soma Tirtha. This bend in the river towards the north, is very conspicuous, and among the natives is considered as reaching from Dakranala to Durgapur or the port of Mungger, which in fact it does: but almost every one bathes immediately under the fort, at the water gate. In all, at the three full moons, perhaps 30,000 people assemble in the course of the year, and a few carry water from hence to throw on the image of Baidyanath; but no Brahman has thought it worth while to attend as a priest, to officiate at the ceremony.

About four miles East from Mungger are five pools lined with brick. One, containing a fine spring of hot water, is called Sitakunda; the others contain a little dirty stagnant cold water, which seems to be entirely supplied by the rains, and are named the Kundas of Ram, Lakshman, Bharat, and Satrughan, after the husband of

Sita, and his three brothers. No mention, it is said by the Pandit, is made of this place in the Ramayan of Balmiki; but the priests say, that an account is given of it in the Kurma Puran a part of the 18 alleged to have been written by Vyas. The legend as usual is curious enough, as showing the inconsistency of the Hindu stories. Ram, (Bacchus,) after having killed Ravan king of Langka, was haunted by the constant appearance of that prince, who, although a Rakshas or devil, was a very holy Brahman, and on account of his piety was served by the Gods as his menial servants. Ram, in order to expiate the crime of such an atrocious act, was desired to travel as a penitent until he met all the Gods and obtained a pardon. In order to procure this meeting he and his wife and brothers came to Kashtaharani, where they knew all the gods would be assembled to bathe. Here he obtained a remission of his sins, and he is said to have left the mark of his foot at the place. There is indeed a kind of representation of this impression on the rock, but it has been made so lately that the Pandits cannot allow this part of the story, which may probably be 20 or 30 years before it gains full credit.

On this occasion the Gods seem to have been rather severe, as while they accepted of fruit from Ram and his brothers, they rejected the offering of Sita, alleging, that they suspected her having been unfaithful to her husband, when she had been in the power of Ravan. Previous to this the Goddess, who was perfectly innocent, had allayed the jealousy of her husband by undergoing a fiery ordeal; yet the gods determined that she should undergo another before they would eat from her hand. This trial she suffered, where the hot spring now is, throwing herself into a pit filled with fire, and when she came pure from its flames, warm water flowed from the rock, as it continues to do at this day. The only authority for supposing that this legend is contained in the Purans is that of the Pandas or priests of the place; and that is I confess, next to nothing. Since last year they have contrived to invent a miracle. They say, that during the last hot season, the water of the well having become so cool as to admit of bathing, the Governor sent orders to prohibit the practice, because it rendered the

water so dirty that Europeans could not drink it. But on the very day when the bricklayers began to build a wall, in order to exclude the bathers, the water became so hot that no one could bear to touch it, so that, the precaution being unnecessary, the work of the infidels was abandoned.

The officiating priests or Pandas are Maithila Brahmans, and amount to 100 houses; but the profits are divided into 60 shares, some of which are subdivided. None of them have studied the Sangskrita language, and the only sort of science that they possess is a knowledge of the legends respecting the place, and some forms of prayer, both acquired by rote. Most of the 30,000 people who bathe at Kashtaharani repair afterwards to Sita-kunda, and worship there; and on the birthday of Ram about 1,000 people assemble to celebrate the memory of that event. Besides, vast numbers of travellers by land and by water, and pilgrims resort to the place, so that the offerings are pretty considerable; but they are divided among so many, that in general the Brahmans of the place have only a scanty subsistence. They possess some land, for part of which it is commonly said there is no title. In the year 1803 I visited the place, and found the Brahmans very importunate beggars, and difficult to satisfy as they rejected with scorn an offering of five rupees; but this year (1811) I found them very modest, and thankful for the same money. This, I am told by my native assistants, proceeds from their having known nothing about me when I visited them first, and from their being afraid when I saw them last of the result of my inquiries.

At Vikramchandi, near the town, is a hole in a rock sacred to Chandi, the Gramadevata of the place, and covered by a small building of brick. This goddess was courted by two of the most powerful sovereigns of India, Vikrama and Karna, who are here considered as having been contemporaries. Karna, in order to procure the favour of this goddess, hit upon the happy expedient of tormenting himself by a daily immersion of his body in boiling butter; and by this means he every day procured 1½ man of gold, which he distributed to the poor. Vikrama, jealous of such favour shown to a neighbouring

king, came in disguise, and entering the service of Karna, found out the manner in which his rival worshipped. He then determined to excel, which he accordingly did by slicing his skin in various places, and having offered his blood to the Goddess, he gave himself exquisite torment by filling the gashes with salt and spices, after all which he went into the bath of his rival. Such a gallant worship obtained the decided favour of the Goddess, who has ever since been called Vikram-chandi. There is no image, but the priest (Panda) is a man of some learning, and makes a good deal of money, as he performs ceremonies for almost every pure Hindu in the town, and offerings are made at the temple every Tuesday and Saturday.

The most common deity of the villages is Dubebhayan-haran. This is allowed to have been in Madhyades, or the central kingdom: but the people of the town will not acknowledge that it belonged to Jarasandha king of Magadha. In fact that kingdom has at different periods had very different extents, and this at one time may have belonged to it, while at others it was excluded. In the Mogul government, of course, it formed a part of Serkar Munger in the province of Behar.

The place called by men Munger, in the language of the gods is said by some to be called Mudgalpuri or Mudgalasram, from its having been the abode and property of Mudgal Muni, who lived long ago, and is said to have excluded Jarasandha, with whom of course he is supposed to have been contemporary. Others say, on the authority of the Haribangsa, that the town derives its name from a certain Mudgal Raja, one of the five sons of Viswamitra, son of Gadhi Raja, who received this part of his father's dominions; but when he lived, or who he was, I have not learned. It must however be observed, that in an inscription seven or eight centuries old found at the place, and perhaps more ancient than the Haribangsa, the name is written Mudga-giri, or the hill of Mudga, and not Mudgalpuri, or the abode of Mudgal. The existence of the saint and prince of that name is perhaps therefore problematical, as Mudga is the Sangskrita name for a kind of pulse, the *Phaseolus Mungo* of Linnæus, from whence also the vulgar name of the place is probably derived.

Major Wilford says, that Sagala is another ancient name for Mungger; but I do not know on what authority, and such of the Pandits, as well as vulgar of the place, as I have consulted, are totally ignorant of the name. The remain of antiquity, which according to tradition goes farthest back, is on a hill called Nauyagarhi, south-east about four miles from Mungger. It is said to have been the prison where Jarasandha king of Magadha had confined 80,000 of the princes of India, whom in pursuit of universal monarchy he had taken prisoners, and intended to sacrifice to the Gods; but fortunately he was killed by Bhim, the brother of Yudhishtir, who afterwards contested the sovereignty of India with his kinsman Duryodhan.

Next to this I find celebrated in this division a Karna Raja, who, as I have said, is by the traditions here made contemporary with Vikrama sovereign of India and who is here supposed to have attempted, but without success, to have seized on the power of that monarch. With respect to Vikrama such confusion prevails, as appears from Major Wilford's valuable treatise on the subject, in the 9th volume of the *Asiatick Researches*, that no attention need be paid to any traditions concerning a person of such dubious existence. This very Karna is indeed one of the persons, who according to Major Wilford is styled Vikrama. Karna as I have said, paid particular attention to the worship of the tutelar goddess of Mungger, and built a house on the hill now occupied by the elegant quarters of the Commandant, and in the time of Major Rennell's survey by a saluting battery. This hill is still called Karnachaura, and the house upon it was not intended for the residence of the prince, but for the distribution of alms. Two tanks near the hill, are considered as the work of the king and of his wife.

From the time of Karna, until that of Hoseyn king of Bengal, the people of Mungger think that their country was overwhelmed by forest. An inscription on copper indeed found in the fort mentions, that Raja Deva Pal, the third of that family, was encamped there with his victorious army, and had constructed a bridge of boats for a passage, while his elephants darkened the face of day, while the dust from the feet of the horses of the

princes of the north spread darkness all round, and while so many princes of Jambudwip attended to pay their respects, that the earth sank beneath the weight of the feet of their attendants. This does not absolutely contradict the opinion of the natives concerning the deserted state of their country for many ages, much less does it support an inference which has been made, of the Pala Rajas having dwelt at Munger. It would appear that the prince was then only passing with his army; and notwithstanding his boasting, was perhaps returning from the Dinajpur district, where, as I have said in my account of that district, he continued to skulk until the retreat of the Moslems, who had invaded Patna his capital, and had overrun the western parts of his dominions.

Hoseyn Shah, the greatest of the kings of Bengal, extended his dominions on both side of the river, as far at least as Munger, and is said to have built the present fort, which, although not strong, has been a very magnificent structure. In the northern gateway, which is built of stone, are many materials, that have evidently been taken from ruins, as the ornamented stones are built into the wall without any attention to symmetry, and these ruins have evidently been Hindu, as on a stone of horn-blende in mass, which appears to have been the lintel of a door or window, there are figures in the human form, concerning which the men of Hindu lore are not agreed. One end of the stone is hid by the wall, but in the accompanying drawings (No. 20), will be found a representation of what projects, which is the most elegant design of Hindu sculpture that I have yet seen. The execution is however less neat than the design, and the drawing therefore looks much better than the original. On the inside of this gate is also a figure carved on granite, and representing the human form (see Drawings No. 21). Although this is very rude, I refer it to the same period with the other, and attribute the difference in execution to the difference of materials; for so far as I have seen in their works, the natives of the north of India have never possessed means of cutting granite with any tolerable neatness.

Near a Sally port, on the inside of the rampart, the fall of the plaster, by which the building was encrusted,

has discovered two stones of almost exactly the same pattern with that at the water-gate, but smaller. These have probably been part of windows; and it is probable, that an accurate examination of the whole wall would discover many such. A very cursory view disclosed several in different parts of the wall, two of which are represented in Drawings Nos. 29 and 30. The former represents the five great gods of the orthodox Hindus with four nymphs. The latter in a foliage has a human head between two sheep, of which the Pandits give no explanation. I do not think that the ruins, from whence these carved stones have been taken, can be referred to any other era with so much probability as to that of the Karna Rajas. The other gates of the fort have been covered with carving, but this is evidently Moslem work, the carving consisting entirely of foliages, and every stone being suited by its ornaments to fit the place which it occupies with symmetry. The stone employed in these gates is very different from either of the former and is a material of very small durability.

It is said, that Akbur took Munger after a severe battle in the vicinity; but so ignorant of history are the people here, that they imagine the prince who lost it, to have been Hoseyn Shah, who preceded Akbur by at least a century. During the whole period of the Mogul government, Munger continued to be a place of importance, and was the station of a series of officers of considerable rank; but I can learn no account of their names, nor characters. Shuja Shah, the great grandson of Akbur, probably when about to contest the empire of India with his brother Aurungzebe, is said to have repaired this fortress; and at the same time erected lines to the west of it, extending from the hills to the Ganges, and about three coss in length. The channel called Dakranala strengthened these lines towards the west; but the prince built over it a bridge, the largest which I have yet seen in the course of my survey, but very far from being a great work. It is now an irreparable ruin. The fort was again repaired by Kasem Ali, who resided in it for a part of two years, while he was on very bad terms with the English. The accommodations in the fort, then occupied by Kasem Ali as his public palace, would appear

to have been very large; but the greater part has been pulled down, and the remainder so altered, for the purpose of suitably accommodating its present occupants, that no judgment can be formed of the style, in which it was built. The chief mosque, in the time of Major Rennell, seems to have been converted into a powder magazine; but as a building much fitter for that purpose has since been erected, the mosque has become the store-house of an European trader. A private chapel, vastly superior to that at Rajmahal is still pretty entire; but has been deprived of some of the marble by which it was ornamented. The ladies of Kasem Ali are said to have occupied buildings without the gate leading to Patna, which have been of considerable size; but are of very uncommon clumsiness, and are now ruins.

The Fort of Munger continued, for some time after the fall of Kasemali, to be the station of one of the brigades into which the Bengal army was divided, and many alterations were made on the interior, to fit it for the accommodation of the troops and their stores: but the station of the brigade having since moved towards the West, the fort has been allowed to go to decay, being a mere station of some invalids, an asylum for unfortunate native soldiers seized with lunacy, and a depot for part of the clothing of the army. On any emergency it might easily be repaired, so as to exclude an irregular native army, and without a total change, could never be made to stand a regular attack, as its defences do not appear to have ever been intended for cannon: but the works are of great extent, and when in repair, must have had a very grand and imposing appearance.

#### *SECTION 8th.*

##### *Division under Thanah Suryagarha.*

This is a jurisdiction of very trifling extent; while the one situated immediately north of it is of enormous size, and a great part of it, in the same plain with this, is separated from the care of its officers by a considerable and uninterrupted range of hills. The whole of that plain, together with the Pergunahs of Chandan and Bhukha on

the Kiyul, might with great convenience be added to this division, which even then would be of a size by no means too great, and there would still remain to Mallepur a vast extent and considerable population.

The Darogah and Commissioner reside at Sherpur, one of the villages which collectively are called Suryagarha, and which is situated on the frontier with Tirahut, which is very ill defined, both parties claiming land on the opposite side of the Ganges from the bulk of their respective jurisdictions: and this confusion here is uncommonly great, as close by Suryagarha is a large extent of a fine plain disputed by this district and those of Behar and Tirahut, the former claiming the care of the police and the latter the adjudication of civil causes and the collection of revenue, while the people here claim both, and the boundaries have never been settled by any adequate authority. While the division continues as at present, a narrow strip along the bank of the Ganges, the situation of the officers is of no great importance, but if the jurisdiction were enlarged to a moderate size, they ought to be placed in a centrical situation, somewhere about Rajpur, now in Mallepur.

In this petty territory three Kazis have a jurisdiction. One who has Pergunah Suryagarha resides. Another who has part of Kharakpur lives at Mungger, and acts by a deputy, who does not reside. The Kazi of Sulimabad resides in the district of Behar.

Of the Hindus that have spiritual guides, six parts follow Brahmans of the Sakti sect, partly residents and partly intruders from Tirahut; fifteen parts follow the Dasnami Sannyasis, one convent of whom is rich, and its occupants adhere to their vows of celibacy, but are annoyed by many intruders; two parts follow the Ramayits, who are vagrants: and one part is of the sect of Nanak, and has one Sanggat.

This is a beautiful and well occupied country. The southern parts contain, or are skirted by some low hills covered with wood, and are productive of rice, and well planted with mangoes. The western parts, towards the Ganges and Kiyul are finely planted with mangoes and palms; but are rather poor. The plantations are not ornamented with bamboos, but some are

surrounded by Sisau trees, that add a very beautiful variety. This practice has also begun in some other parts, but is nowhere else so common. The eastern parts are low and bare of trees, being deeply inundated, but in spring are covered with one continued sheet of corn.

There are two houses and one shop of brick; but the habitations are no ornament to the country, the misery of the villages being too much exposed to view; nor is there any public building worth notice.

Besides Sherpur, where the Thanah is, Suryagarha contains 3 market places, Bazar Suryagarha, Bazar Moulnagar and Bazar Jakatpura. The whole contains about 500 houses, but is so much scattered, that it has little appearance of a town.

Medanichauki, N. E. from the Thanah, contains about 300 houses; Nawabganj S. W. about 2 coses, contains about 100 houses; and Rampur, S. W. about 4 coses, contains 250 houses. The Moslems have no place of worship of any note.

The chief place of worship among the Hindus is at Suryagarha, where the river takes a small bend towards the north; but as there is no rock in contact with the water, it is considered as very inferior in efficacy to the place where the river washes the rocky foundations of the Vindhyan mountains; 20,000 people may however bathe at the 3 assemblies, which annually take place.

The most common village deities are Chandi and Ratnamohan. But these petty Gods are here eclipsed by Kshemkarni, who although she has only one place of worship, receives annually from 1000 to 1200 goats. The people whom I consulted, knew no older appellation for the country, than that of Serkar Munger, in the province of Behar, established by the Moguls.

About five miles East from Suryagarha is a monument, which like Asurgar in Puraniya, and the Karnagars near Champanagar, and Sultangunj, is in the Hindu style, which I consider as of the greatest antiquity. It consists of a great heap containing bricks, and about 500 yards square. As there is no cavity within, it seems to have been rather a large palace or castle, than a fortified town. It is said, that, until a few years ago a ditch was very

observable; but it has been filled up by an extraordinary inundation that happened nine or ten years ago. On the east side of the great elevation is a lower space, about 400 yards square, which contains many bricks; but the surface is very uneven, as if the buildings on it had been detached. East from this again are five or six old tanks, the spaces between which contain some small elevations and bricks. The tanks probably furnished the materials for the whole work, the country round being exceedingly low; and the buildings now forming little heaps, were probably the abode of domestics. All the people whom I consulted, attributed this work to Parikshit, the second prince of the family of Pandu, which succeeded Jarasandha of Magadha in the sovereignty of India. This family however resided at Hastinapur, far up the Ganges. Whether or not this be the ruin meant by Major Wilford, (*As. Res.* vol. 9, p. 109,) and said to have been the residence of a Karna king of Magadha, in the 12th or 13th century of the Christian era, I do not exactly know. It is the only Hindu ruin of any note between Mungger and Suryagarha of which I heard, and it is situated at no great distance to the N. W. from the Dahara of the Bengal atlas, the marks by which Major Wilford distinguishes his ruin; but the Dahara of Major Rennell was called to me Dharhara, and could not therefore, I imagine, be the Dahara from which Karna the King of Magadha derived his name; nor have I seen any ruin attributed to such a person.

It is said, that at Abgel, between two and three miles below Suryagarha, there was a Moslem city of considerable size; but the river has there, for some years, been making great encroachments, and I could see no remains of buildings on its banks, except a ruinous mosque of brick, and that of an insignificant size. During the former encroachments of the river it is however said, that every year the foundations of large buildings were exposed to view. In this division there have been several small forts belonging partly to turbulent chiefs, and partly to the officers of the Mogul government, employed to keep the others in awe. The whole has become totally ruinous, being fortunately no longer of use.

## SECTION 9th.

*Division under Thanah Mallepur.*

This is a jurisdiction of enormous extent, and part of it is very populous. In my account of the two last divisions I have proposed means by which, without any increase of establishment, it might be reduced to a moderate size.

The jurisdiction is not only of an enormous size, but of an exceedingly irregular shape, and the residence of the native officers is placed close to the frontier of the district of Behar on one side, and has on the other a detached portion of Ramgar. Should the alteration proposed be carried into effect, the Darogah and Commissioner should be removed from Mallepur, where they now reside, to the fertile banks of the Ulayi.

In this division two Kazis have jurisdiction, one, who has Pergunah Kharakpur, does not even keep a deputy in this part, and the deputy that resides at Tarapur serves for both jurisdictions, and both are of an enormous size. The Kazi of Gidhaur does not even reside in the district, nor does he employ a deputy, but occasionally visits the place.

Of the Hindus that have spiritual guides, two parts follow Brahmans of the Siva or Sakti sects, some of whom reside; others do not; five parts follow the Dasnami Sannyasis, of whom there are eight convents, the chiefs of which, although they mortify the flesh exceedingly, are a good deal annoyed by strangers. One part follows the Vairagis or Ramayits who are mostly vagrants from the west; two parts, finally, are disciples of Nanak, and their instructors also are vagrants.

This division, where it is properly occupied, is very beautiful, being rich land finely diversified by hills and woods, and the cultivated parts are ornamented with numerous groves of the mango and a few palms, but no bamboos.

Besides many scattered hills, there are three very remarkable groups. The largest towards the North, is an uninterrupted chain, which extends east from the banks of the Kiyul, and after running through the northern parts of this district for a long way, turns

suddenly to the North, and forms the boundary between this and Tarapur. Adjacent to the south of this ridge, and separated only by narrow rugged defiles, is an extensive mass of a very irregular form, and surrounded by a cluster of smaller hills. Each of these has a distinct name; but I could procure no general name either for the whole collection of hills, for the long ridge, or for the large irregular mass; each peak of these however has a name, or rather various names. The next great range is that which overhangs the old castle of Gidhaur, and extends west from thence to a great distance. I have not been able to learn that either the whole or any part of this ridge has acquired an appropriate name. The third great collection of hills is in the S. E. corner of the division. It consists entirely of detached peaks, each having an appropriate name. One of them is called Ganda, which Major Rennell has extended to the whole mass; but, so far as I can learn, this is not in imitation of the natives. All the hills are covered with woods or bamboo growing spontaneously, of which there is a vast quantity; and the woods extend over a great proportion of the level country. In some remote parts the trees and bamboos are of a tolerable size; but in common, if compared with the forests of Nepal, Kamrup, Chatigang or Malabar, they are diminutive.

The houses, as usual in the western parts of this district, are no ornament to the country; on the contrary their meanness is very disgusting, nor are they hid as in the Eastern parts of Bengal, by hedges or trees. The Zemindars of Gidhaur, although a very powerful family, do not dwell in brick houses; but they have an office for collecting their rents built of that material, as a safety for their papers, and five shops are also built of the same. There is no public work that is any sort of ornament.

Mallepur, the residence of the Darogah and Commissioner, contains about 300 houses, finely situated on the banks of the Angjana river, and not on the Kiyul as represented in the Bengal atlas. Jamuyi contains about 150 houses, among which are the six buildings of brick above-mentioned. Sono contains about 200 houses. No other place can be called a town,

The Moslems have no place of worship at all remarkable.

At Simriya, S. W. from the Thanah about four coses, is a temple founded by Puran Mal of Gidhaur, who built also the celebrated temple of Baidyanath near Deoghar. The work in this division is comparatively trifling, as it consists of four or five small brick temples, surrounded on three sides by a tank. The largest contains a Priapus called Dhaneswar, and at the annual festival of the God from three to four thousand people assemble. A potmaker is priest for the whole, and has an endowment.

At Barasan hill, on the northern face of the great mass in the northern cluster of hills, and facing a narrow valley between that and the long ridge is a fine spring of water that is not hot. It falls into a small pool surrounding a Priapus. The place is said to have been rendered holy by the residence of a very great saint named Sringgirishi Muni. It is supposed, that any person who presumed to defile the place would be attacked and punished by a kind of bee called Bhramar. Notwithstanding all these circumstances the place has not acquired great repute, and not above a hundred assemble to celebrate the (Sivaratri) festival of the great god.

The two most common village deities are Kokil-chandra, a military Brahman, and Garbha Kumar a pot-maker.

The most ancient monument of antiquity is on a hill near the Thanah, where the ruins of some buildings, said to have been erected by the god Ram are shown; but the hill forms a part of the Ramgar district.

Next in antiquity to these, in the opinion of the natives, is the ruin of a town called Indappe, situated a few miles East from the old castle of Gidhaur. I have already mentioned all that I could learn concerning Indradyumna or Indradawan, the founder. The work is pretty extensive, the fort being a square of about 1,650 feet and the plan (Drawing No. 4) will convey a better idea of the whole than a verbal description. The rampart of brick has been about 10 feet thick, and the ditch about 15 feet wide, so that neither could have been intended for any serious resistance to an army; but they were sufficient to

guard against surprise or insurrection. The east face is rather irregular, being bent in south from the gate, which is not exactly in the middle, as is also the case with the western gate. In the northern and southern faces are no gates. Before the eastern gate are two heaps of brick, that have been considerable buildings. Within the outer fort has been a citadel. To the left of the passage between the outer gate and that of the citadel, entering from the east, are two considerable heaps of brick; that nearest is said to have been a temple of Siva, and a priapus still remains. On the right towards the N. E. corner of the outer fort, are three very considerable heaps, surrounding four smaller. Towards the S. W. corner of the inner fort, on its south side, is another heap; and these are the only traces of buildings in the outer fort. On entering the citadel from the east, you have on the left a mound, which, from its great height is by far the most conspicuous part of the whole building. It is said to have been a place (Chandini), to which the Raja repaired to enjoy the freshness of the evening air; and this tradition is confirmed by the remains of a small terrace of brick, as usual in such places, that has been built on the top of the mound. The mound is however so very great a member of the whole, that I rather suspect it to have been a solid temple of a Buoddh; as we know that the Rajas of this part of the country, immediately previous to the Muhammedan invasion, were of that sect. Beyond the mound is the royal palace, as it is called, raised on a lofty terrace 220 feet long by 110 wide. Traces remain to show that this terrace has been occupied by three apartments, where probably the Raja sat in state, while his family was lodged in wooden buildings, that have left no trace. The brick buildings in the outer fort, and without the eastern gate, were probably public offices, and the officers and domestics of the family were perhaps accommodated in buildings of no durability sufficient to leave traces that are now observable.

A Brahman, who was cook to Indradyumna, is said to have had a house at Jamuyi, where some heaps of bricks are shown as its remains.

The old castle of Gidhaur is a considerable work. The most common account of it is, that it was built by

Sher Shah, who expelled Homayun, and became Emperor of India; but many allege that the founder is totally unknown; and others again allege that it was built by a Hindu officer, who was agent for the king that expelled Indradyumna, and who governed the country for some time, after which the garrison was withdrawn, and the country for many years continued a forest, inhabited by small bands of robbers, who made predatory incursions into the cultivated country towards the Ganges. A description of the ruin may serve to throw some light on the subject. The fort, or rather castle, consists of a square wall, built rudely of uncut stones, taken from the adjacent mountain, and very injudiciously disposed. The stones, by which the walls are faced, are tolerably large; but in place of being built with their ends alone exposed, the greatest extent of smooth surface has been exposed to view, and the interstice between the two faces has been filled up by loose stones, thrown in without the trouble of building, on which account the wall does not possess strength in proportion to its great thickness. The walls, at the middle and angles, are 23 or 24 feet thick at the bottom, and about 17 feet at the top; but in the middle, between the gate, in the centre of each face, and the angles, the wall is narrower by seven feet, owing to stairs being taken from its thickness as will appear by the plan (No. 5). The walls seem to have been about 30 feet high, besides the parapet, which has been only intended for the use of small missile weapons, and not for cannon. The projecting works are not higher than the curtains, and there has been no ditch, nor is there the smallest trace of any building for the accommodation of the garrison, which must have been huddled in the area of the castle. At each side of each gateway, in the thickness of the wall, is an arched recess for the security of the guards. The northern and principal gate has been defended by an outwork, but this was probably a more modern work, as it never appears to have been strong, and, having been hastily erected, has fallen to the ground. The curtain between that gate and the N. W. angle has evidently fallen, and has been rebuilt very rudely and hastily, as no flanking projection has been added. A hasty attempt has been also made

to strengthen the other gates, by straitening the passages; and this has been effected by placing, at each side, a column of stone, evidently taken from some more finished ruin, as the column is cut into regular form, and is of a different nature from the rock of the adjacent mountain, with which all the original parts of the castle have been built. The columns are connected by the fragments of others, laid across their tops, and not by a stone cut in the shape of a lintel, as would undoubtedly have been the case, had they been cut on purpose for their present situation. Besides, the pillars are not at all connected with the walls, which they undoubtedly would have been, had they made a part of the original fabric. Three of the gates retain the name of the elephant, horse, and camel; but that towards the east is called the gate of the great God (Mahadeva), and an image of Priapus is placed at one side of the entrance. This, I have no doubt, shows the castle to have been a Hindu work; nor did the early Moslem kings, so far as I recollect, employ Hindus in commands of trust. I think it most probable, therefore, while Indappe was the usual residence of Indradyumna, that the castle of Gidhaur was his principal stronghold, by which he secured a communication with the fastnesses of the mountains. It is very likely that Sher Shah, in his war with Homayun, he advancing from Behar, and his antagonist from Gaur, may have occupied the castle, repaired it, and taken some of the materials from the more elegant ruins of Indappe. The unsightliness of this rude building has probably been concealed by a coat of plaster, some traces of which may be distinguished at the southern gate; but when compared with the castles of the barbarous chiefs of Europe in the 14th century of our vulgar era, its appearance must have been as miserable as it has been inferior in strength to these rude but magnificent structures.

In various parts of the division are the remains of sundry small forts built by persons of the Kharakpur and Gidhaur families to whom it now belongs. In the Government of Mr. Hastings these were destroyed by Captain Brook, who was sent to reduce the chiefs to obedience.

## SECTION 10.

*Division under Thanah Tarapur.*

This is an enormous jurisdiction, which as I have said is united with the petty territory of Kumurgunj under the same Commissioner; and I have already proposed that the jurisdictions of the two officers of police should be rendered more equal by annexing Kumurgunj to the northern parts of this division, while the southern should be made a separate jurisdiction. This appears to me the more necessary, as the inhabitants of these southern parts have little or no idea of legal authority, and are still skulking among the woods, with a hankering after their former habits of depredation. I think it probable that the establishment of native officers among them might contribute to check these propensities, and to encourage useful labour, although in this district all such situations seem to have been carefully avoided, and the officers of government appear to have been studiously thrust into corners where there was little use for their exertions. In such remote situations the allowances should be made rather more advantageous than common, and in order to bring settlers, there should be a large establishment of people from the more civilised parts. Some little encouragement might perhaps be given to induce artists and traders to accompany the officers of police and law. The number of pilgrims resorting to Baidyanath hold out an encouragement, as the place selected might always be so contrived as to be a convenient stage.

The Commissioner does not reside at the same place with the Darogah, nor does either of them live near the centre of their respective jurisdictions.

The whole is under one Kazi, who lives in Mungger, but has a deputy at Tarapur.

About three-fourths of the Hindus have spiritual guides. Of these ten parts follow Brahmans of the Sakti sect, some of whom reside, others do not. Nine parts follow the Dasnami Sannyasis, of whom there are four convents, who reject the comforts of marriage, and five men who indulge their appetites, but many vagrants intrude; four parts are under the guidance of the

Vairagis, of whom there are three convents; one part, finally, is under the disciples of Nanak. There were formerly three Sanggats, but so many vagrants have intruded that the resident teachers could no longer subsist, and two of them have shut up their houses, and have betaken themselves to a vagrant life.

The northern parts of this division are of the same dismal appearance with the interior of Kumurgunj, on which they border, and which have been already described. South from thence is a very beautiful level country, well occupied, and finely planted with mangoes and many palms. It contains a few scattered rocks, that add to its beauty; but is in general low, and well supplied with water, which can be raised by machinery from canals or wells, the water in many places being found a few feet below the surface. The western parts are hilly, composed chiefly of portions detached from the great mass described in the northern parts of the East division.

Among these hills there are many fine valleys, but in general much neglected, both being overgrown with woods of small trees and bamboos. Two other clusters of hills are remarkable. One towards the east is on the boundary of Ratnagunj and Bangka, and consists of detached hills, each of which has a peculiar name; but the cluster has no common appellation that I could learn. The country to the south of this, and east of the first mentioned cluster of hills, is of the fine nature that I have before described, near the hills being mostly fitted for winter rice, and far from them being fitted for various other crops; but towards the hills are some extensive woods. In the south end of the district is part of the cluster that I have described as belonging to the S. E. corner of Mallepur. Between these three clusters is a large space, in which I neither saw nor heard of hills, but which I had no opportunity of thoroughly examining, because it is out of all common routes and is covered with forests through which it would have been difficult to pass, without a considerable expense in clearing a road. In this the people are very thinly scattered. The woods contain immense quantities of small bamboos.

The houses, as usual in the western parts, are very mean. Even that of the Raja of Kharakpur, although

it contains some small portions of brick, is but a very sorry place. Near it, however, he has a very handsome mosque, overhanging the Man in a fine situation, while he is erecting opposite a building that promises to be ornamental, and is intended to celebrate the memory of the grandsons of the prophet. The vicinity is ornamented by the ruins of a house that belonged to his grandfather, and that went to ruin during the insurrection, which he raised against the last remnants of the Mogul force. It has been a very large building, and looks more like an old European castle than anything that I have seen in the course of this survey. The Dewan of the Raja has also a brick house, the only other one in the division. Among the forests of the interior of this district (Janggaltari) the houses make a still worse appearance than in the open country ; not that the huts are much worse, that being scarcely practicable ; but the extreme jealousy of the men, in order to conceal their women, has erected a thick fence of the withered branches of trees, that make the most dismal appearance possible, and entirely conceal the huts, which in most other places are rendered somewhat more agreeable to the eye, by being covered with gourds, pumpkins, or a climbing bean.

There is no public building of the least note Tarapur, where the native officer of police resides, contains two market-places, Bazar Gazipoor, and Hat Tarapoor, with about 200 houses very much scattered.

Arjusgunj, the residence of the Commissioner, has more the appearance of a town, and contains about 500 houses, with a neat small mosque in good repair.

Kharakpur, the residence of the owner of the whole division, and of other vast estates, contains about 250 houses.

Belwari and Mozuffurgunj, two market places, have each rather more than 100 houses.

The only place of Moslem worship considered as of any note is the monument (Durgah) of Shah Chandan Auliya, and the whole of Kharakpur is considered as the country (Velayet) of the saint. There is no great assembly, but both Moslems and Hindus make offerings when in distress. The tomb and mosque at Lakshmipur are both of brick. A whole village has been annexed free of

rent to these buildings, and is enjoyed by a person, who acts as religious instructor (Pirzadah) for many people and is called the Sejjadah Nushin of the place. A Fakir also attends, and has a small endowment. The Raja gives 29 rupees a year to defray the expense of lamps, and  $\frac{1}{2}$  anna a day to support a sweeper.

There are many places where attempts have been made to attract the notice of devout Hindus, but with very little success. I shall mention some of the most remarkable.

On Dholpahari, a curious rock of granite situated in a very low country, has been erected the tomb (Samadhi) of a holy Sannyasi, who lived in a convent at the bottom of the hill, as does his 13th successor, Achal Bharati, who has an endowment of 240 bigahs (139 acres) and a good house of brick ; but this is kept in the most slovenly condition that I have ever seen. The tomb, although it has no pretension to architectural merit, is in tolerable repair, and from its situation looks well. The most remarkable thing about the place is an image of Brahma, which is at the foot of the hill, and to which the chief of the convent makes daily offerings, a worship which seems to be very generally exploded, although many suppose that Brahma was once the god most commonly worshipped among the Hindus. It must however be observed that at Budurkhan, about two miles N. W. from Tarapur, there is another image called Brahmakura, which however has only two arms and eyes and one head, while Brahma has four heads and more arms than would be suitable for a man. The image, it is said, is very old, and the people fancy that it sweats in cold weather. A Maithila Brahman acts as priest. Many people in distress frequent the place, and sacrifice goats, which are eaten on the spot.

At Tarapur a cultivator of betel-leaf was able to persuade the people that, while digging, he had found a Priapus, which offered itself to his worship, and this has been attended with considerable success, as his descendants, who now enjoy the office of priests (Kaphris) have a little land, and by the support of the God have increased to ten families. At the Sivaratri about 1000 people assemble ; and every full moon from one to two hundred make offerings.

South from Tarapur is a very picturesque rock of granite, at a village called Madhusudanpur or Devghara. On its summit is a small temple, to which none of my Hindus would venture to ascend; although they were very desirous, and although a Moslem Laskar showed them an example; but the precipice is tremendous, and the ladders were very bad. It contains no image; but it is said, that formerly it contained one of Narayan. Why this should have been removed, cannot now be ascertained. Lower down the hill is a representation of the human feet, like those on the Jain Temple, near Bhagalpur, and which, like those the vulgar call Vishnu Paduka; but they are dirty, and are neglected even by the sect of Vishnu. These may perhaps account for the temple on the hill being deprived of its image. The hill is now considered as sacred to Siva, and a Priapus is placed in a small temple some way up the ascent, and called Ungchanath, or the lofty Lord, probably from the old name of the place, when the temple on the summit of the hill was the chief object of worship. At the Sivaratri from 200 to 400 people assemble to worship the Priapus. The priest has an endowment of 51 bigahs (acres 30) and calls himself a Rajput; but many pretend, that he is a Pahariya.

West some miles from the above hill is another temple of Priapus on a very romantic hill called Ranggannah; but it has attracted still less notice. The priest is a Cowherd.

Gauripahar is a most romantic rock, some miles east from the lofty Lord, and there are at the place two ruinous temples, one of Siva, and the other of his wife. On a rock near these temples are carved some rude figures representing the solid temples, used in the worship of the Bouddhists; but I could trace no tradition respecting the persons by whom they were made. One of them is represented in the 7th Drawing. Near it, on the rock, is carved in a modern Hindu character the name Daniyali Saha Daska Sertaz; but the Kanungoe pretends that this was done by the son of a Moslem King, to signify that he was protector of the Kanungoe's ancestor.

Bishahari is the most common village deity, but Dubebhayharan has also many votaries, and Kokilchandra and Garbha Kumar, mentioned in the last division

have some. Each place has a priest (Kaphri) and generally a small endowment. The priests are of many castes, and receive all the offerings. One image of the great God is considered as a village deity, as is also Kalkati, who was the tutelary deity of the Kharakpur family, while they were Hindus. A Brahman from the remote regions of Sakadwip attends this Goddess.

The people here allow that the whole of Kharakpur is situated in Magadha, and it is all included in Serkar Munger of the Mogul province of Behar.

The oldest ruins are attributed to the Kshetauris, who possessed the country before they were expelled by the Rajputs, ancestors of the present Muhammedan family. I shall afterwards have occasion to mention the foul deed more fully, and it would be unnecessary to enumerate the small ruins left by the petty chiefs of the Kshetauris, who were very numerous; but all appear to have lived in brick houses, and to have been somewhat more civilized than the barbarians by whom they were expelled; and they do not appear to have been so turbulent, as round their houses I perceive no traces of fortifications; whereas after their expulsion, the country was filled with small mud forts, erected chiefly by the Rajputs, but some also by the officers of the Muhammedan government. The ancestors of the Rajas in particular fortified every pass in the mountains, and whenever they were on bad terms with the government, retired into the narrow valleys among the hills where they could not be followed by the Mogul horsemen. These works are quite ruinous; and except to destroy them, as nests harbouring banditti, never deserved notice. Having premised so much, I shall here confine myself to describe the works at Kherahi Hill, in the N. E. part of the division, attributed to Sasangka Raja, the last chief of the Kshetauris.

At the North end of the small ridge named Kherahi, extending nearly N. and S. and not E. and W. as represented in the Bengal Atlas, and towards a small detached peak called Nari, is a very considerable space in which the ruins of houses, built with brick, may be traced, and in this are several small tanks, as usual in Indian towns. From a small market, situated at the north end of the hill, I ascended gradually up its eastern

face, by a road formed of flags cut from the mountain, but very rude. Where the ascent is steep, these flags form a kind of stair; where the declivity is gentle, they form a pavement. Having reached the top of the ridge, the road divides into two. One branch goes south to the second stage of the hill, the other runs north, along the first stage, to its end, which overlooks the market-place. I proceeded first to this, passing on both sides many scattered bricks, where there probably have been many small temples. On the west side of the road I found a flag, on which was cut the characters delineated in the drawing No. 8. No one, that I have been able to find, can tell what character it is; but it has a strong resemblance to the Pali of Ava, which Major Wilford, with great reason, thinks the same with the old character of Magadha, from which country Gautam, the law-giver of Ava, undoubtedly came. On the end of the hill, commanding a most noble view of the Ganges, are the foundations of a small brick chamber, near which is a flag, on which is carved a mark of the form placed under the characters (in the 8th drawing). This chamber was pointed out by the villagers as the place in which the Raja was wont to enjoy a cool air, but this seems doubtful.

Having returned to the other branch of the road, I for a little way ascended the second stage of the hill, when I turned to the left to see a very fine circular well (Indara), which had been lined with brick, and had been at least 16 feet in diameter. A wild fig tree has been allowed to take root, and to throw down the wall, so as entirely to choke the well, which in all probability was very deep. Returning again to the road, and ascending the second stage of the hill, 30 or 40 yards, I came to an image of Priapus, more resembling the object it is intended to represent, than any attempt of the kind that I have seen in India. Immediately above this is a large heap of brick, which is commonly called the Raja's house; but appears evidently to have been a temple, for its size is not suitable for a dwelling, and the steepness of the hill would have rendered it exceedingly inconvenient except as a place of strength, and there is not the smallest appearance of fortification. This heap consists of two parts, one between the summit of the hill and the

Priapus, and one on the summit. The walls of the former seem in some measure to remain, but the roof has fallen in, leaving an irregular mass of bricks with a cavity in the centre. Near the Priapus a pillar of granite projects from the brick three or four feet; we may form a judgment of the reliance that is due to the reports of the poor neighbours by their supposing that the Raja's elephant was secured by tying him to this pillar. The building on the summit has been immediately adjacent to the other, and some of its foundations, constructed of cut granite, still remain. The walls have been thrown down the hill, where many masses of granite may be seen; and among them parts of doors and windows rudely carved. A Ganes is very distinguishable, and there are other idolatrous figures; but so much defaced, that the particular objects which they represented are not recognizable. This building has been between 20 and 30 feet square. In the hollow between this second and the third and highest summit of the ridge have been several small buildings; and on the third summit, overlooking the lower and southern end of the ridge, has been a small chamber of brick, about nine feet square, with one door towards the N. E., and no window. This the people call the Queen's apartment; but we cannot suppose, that even a Hindu lady could endure to be squeezed into such a hovel. It looks more like the den of a hermit. On the whole, I am persuaded that the buildings on the hill have been dedicated to religion, while the Raja dwelt below; and from the appearance of the inscription, in particular, I think it probable that the religious buildings on the hill are of great antiquity, probably coeval with Jarasandha when the Pali was the learned language of Magadha..

#### SECTION 11.

##### *Division under Thanah Bangka.*

This is a jurisdiction of an extent so enormous that very little can be expected from the exertions of the native officers, especially as petty causes are decided by the Commissioner of Ratnagunj, of itself an abundant charge. The wild and neglected state of this division and the disposition of its inhabitants would, in my humble opinion,

require that it should be divided into at least two jurisdictions, each having a full establishment, which might be easily spared from parts of the district where the divisions are trifling. A part of Virbhumi that projects on the fine lands on the banks of the Chandan, and that cuts off the free communication between the upper and lower part of the territory should be annexed to this district.

The chief officer of police resides just at a corner of his jurisdiction. The Commissioner resides in the division of Ratnagunj.

Three Kazis have a jurisdiction. One resides at Bhagalpur ; one at Munger, and the other in the division. Being all annexed to Pergunahs, they are in general mere creatures of the Zemindars, while an important part of their duty is to protect the property of those whose effects are brought to sale, especially for the payment of rent. Every precaution therefore should be taken to make them totally unconnected with the Zemindars, which will be most readily effected by rendering all divisions of their, as well as of other, jurisdictions totally unconnected with the extent of landed properties.

Of the Hindus, who have spiritual guides, two parts follow Brahman Gurus ; four parts follow Dasnami Sanyasis, and one part the Vairagis from the west of India.

This is a most beautiful territory there being scattered through it a great number of small detached hills and rocks that have appropriate names, and being finely wooded add much to the beauty of the country, without occupying a great space. The plains or swelling grounds by which they are surrounded are by nature very rich, but have been most miserably neglected, owing partly to the turbulence of former times, which introduced habits not yet overcome, and partly to an indulgence shown to the Zemindars, by whom it has been grossly abused. Near the Chandan river and a few other large streams, however, there is much most beautiful cultivation, with fine plantations of mango trees and a few palms, and in the northern corner a few bamboos. The forests of the West resemble those of Tarapur, consisting chiefly of a variety of small trees and bamboos, with many Mowal trees near the scattered villages ; but towards the East the woods, where not cut, are more stately, contain no bamboos, and consist chiefly

of Sakuya and Asan, both of which, however, are in many places stunted, by extracting rosin or feeding Tasar. Except towards the N. E. the Mowal is there also very common. In the whole division there is no dwelling house of brick nor any public building that is an ornament to the country, or the least relief from the uniform misery of the huts. In the woods these are however hid from view, as in the last division, by still more ugly fences of withered branches and leaves.

Bangka is a poor little town, which may contain 120 houses. Subalpur and Jaypur contain each about 200 houses, and Chandan about 100 houses.

The Moslems have no place of worship at all considerable. That most attended by the Hindus is Madhusudan, a very modern work, and which seems to have derived its celebrity entirely from a neighbouring hill named Mandar. I visited Madhusudan, concerning which I had heard much, and it was by mere accident that in passing I saw some of the ruins that are near the hill; nor did I discover that it contained anything interesting until I was too far removed to be able to visit it. I was therefore under the necessity of contenting myself with sending an intelligent person, who brought me a facsimile of an old inscription and some account of the place. Mandar hill is an immense detached rock of granite, like those on which the hill forts of the south of India have been erected. There is said to be a book called the Mandar Mahatma, which gives an account of the place. Some people told me that it is a portion of the Skandha Puran, but such assertions I know are of very little value; and a Brahman, who said that he had a copy, told me that it was first delivered orally by Kartik to Siva, who again related the contents to Raja Parikshit, who repeated it to Kapil Muni, who published it in writing. The Brahman took the price of transcribing the book, but has not favoured me with the copy. This is perhaps no great loss, as the legend is probably so monstrous as to afford little insight. The oldest buildings are said to have been erected by Raja Chhatra Sen of the Chol tribe, who lived before the time of the Muhammedans; and the Chols were expelled by the Nat, who in their turn gave way to the Kshetauris, who fled before the Rajputs that now possess the country.

Inscriptions attributed to the Chol are engraved on the rock at two different parts, but the inscription at both would seem to be the same. That in the two lines (Drawings, No. 9) is lowest down, and its letters are about seven inches long. The higher (Drawings, No. 10) is written in four lines, the letters of which are about an inch and a half long. None of the buildings on the hill are near these inscriptions; but at some little distance from the upper is said to be a very rude outline of the human face, which the people call Madhu Kaitabh; and say, that Madhu and Kaitabh were two Asurs or infidels, who were killed by Vishnu before that god was incarnate. Some way above this is a small temple of Siva. On the summit of the hill are two small temples. One contains six representations of the human feet exactly like those in the Jain temple at Champanagar. The people say that two represent the feet of Vishnu, two those of Saraswati, and two those of Lakshmi. In the other temple was formerly the image of Vishnu, under the title of the destroyer of Madhu (Madhusudan); but it is now empty. Chhatrapati Ray Zemindar of Mandar, as I am informed by his successor in the seventh generation, removed the image to a small brick temple (Dalan) now in ruins, and placed at the foot of the hill. Near this he built a Math, to which the image is carried on the festival, and which, according to an inscription, he erected in the year of Sak, 1521 (A. D. 1589.) Near this also Antiknath, a Sannyasi, took up his abode, and died. His pupil, Achintagiri, built a house entirely of cut stone, which is still occupied by his successors, and is the rudest building of this material that I have ever seen. It is said to have been built about 150 years ago. The image of Madhusudan is supposed to have been made by Rambchandra, one of the incarnations of the God, which it represents. It remained some time at the temple built by the Rajputs, when Rudramohan Das, a clerk in the office of the provincial Kanungoe, removed it to a small building about two miles distant, which has been greatly enlarged by Rupnarayan Deo, a considerable Zemindar now alive. It is an exceedingly rude work, although of considerable size; and the priests, who are numerous, are most importunate beggars.

The two temples on the top of the hill, a stair leading up to them, the inscriptions and some rude carvings on the rock are attributed to the Chol Raja. Among these carvings is said to be a personification of the Kaliyug or degenerate age, at which the people assembled on the holy day were wont to throw dirt; but the practice was prohibited by a late magistrate, and the people had the good sense and moderation to take no offence. Besides these remains on the hill, ruins are scattered about its foot for above two miles in extent, and are attributed to the Chol Raja. I saw them in passing by mere accident. Between the present temple of Madhusudan and Mandar hill I saw a great many stones and fragments of pillars carved in a very rude manner, but which must evidently have formed a very large building. A small tank at the foot of the rock is called Manoharkunda. On its East side is a stair built of stones, evidently taken from ruins; and near the stair is lying a stone, on which is very rudely carved in relief the figure of a female deity called Papaharani, or destroyer of sin. It has been very much mutilated, but communicates her name to the tank, which is more usually called Papaharani than Manohar. The scattered stones and bricks of ruins extend a considerable way from Papaharani beyond the buildings erected by Chhatrapati to a pretty considerable tank. Near this has been a temple, which has quite fallen; but the object of worship called Jagatma or Jagadamba, (the mother of the world) still remains. It is a large flat stone, on which have been carved many figures. The chief has been so much mutilated that I cannot say what it represented, but it probably has had somewhat the form of a woman. West from the temple of Jagatma, very near it, and evidently dependent, has been another smaller one, still pretty entire. In this is the image of a quadruped, with its fore parts turned towards Jagatma. It is said to have represented a cow; but it is so much mutilated and so rudely carved that I think no one can possibly say what animal may have been intended. It is called Kamdhenu. Madhusudan is a place of pilgrimage, to which about 10,000 people assemble on the last day of the solar month Paush (Tiluya Sangkranti), and continue performing their devotions for three days. I

suspect much that in this place the worship of Madhusudan has been of no long standing, as I am told that the chief object of the multitude is to bathe in the pools on the hill, especially in Manohar, and to worship Papaharani. So strongly inclined to the marvellous are the people here, that they imagine that there is a stone stair at each side of this tank, and that it contains 11 bigahs. of land. This is at least double the size ; and, if the ghats exist in the eye of faith, I may safely assert, that they are invisible to the eyes of the infidel. The people also imagine that the water of Akasgangga, a pool on the hill, is hot ; but I am assured by the messenger whom I sent, a descendent of the god Siva, that the heat is not perceptible to the senses. The priests of Madhusudan are Maithila Brahmans, and the modern inscriptions on the works of Chhatrapati are in the Maithila character.

At Dhamsaing is a Priapus under a tree, where about 1000 people assemble to celebrate the (Sivaratri) festival of the God.

There are many other small places of worship, but of little note, although in their immediate vicinity they are celebrated for some qualities abundantly miraculous.

This was allowed by the people, whom I consulted, to form a part of Magadha, and was all comprehended in Serkar Mungger of the Mogul province of Behar.

A great many small forts built by Nats, Bhungiyas, Kshetauris, Rajputs and Moguls have been successively built ; but all were trifling, all have gone to total ruin, and most of them were modern. The Nats and Kshetauris seem, among the above-mentioned Hindus, to have been the most polished, and Bhimsingha, a chief of the latter, has left behind him some works of respectable size. At Padmapur he had a fort said by the Pandit of the mission, who visited it, to contain about 100 bigahs. In this was his house built of brick, a tank with a descent of stone, and a temple of Siva called Odeswarnath. The image rose spontaneously from the water ; yet the temple has fallen. According to an inscription it was built in the year of Sak 1482 (A. D. 1550).

At Dangra the same person, seven years afterwards according to an inscription, erected a temple to Singh. eswar, a priapus which arose from the earth in a wood,

and disclosed itself to the Raja in a dream. This chief at the same place built also a temple of Durga, and a house for the accommodation of some old images, that had been mutilated by Kalapahar. The inscriptions at these two places are in the Tirahuti character.

At Kusbah Godda near Karariya a Nat Raja has left behind him an old fort, containing some slabs and pillars of stone.

The most common village deities are Nilamata represented by a stone pillar, Dubebhayharan, Hari Ojha, Jagu Hajra, Danuyat, Garbha Kumar, Pahar-Danab, with other uncouth named personages to at least a hundred.

#### *SECTION 12th.*

##### *Division under Thanah Fayezullahgunj.*

This is a jurisdiction of moderate size, and the native officers reside near its centre ; but it is not compact. A considerable part of the petty jurisdiction of Paingti is hemmed in between it and the Ganges. A small portion extends to the other side of that immense river, where it is surrounded by Lakshmipur, and it surrounds detached portions of Ratnagunj and Kodwar. These defects might be easily remedied, but it includes several detached hills belonging to the northern tribe of mountaineers, who are totally exempt from the jurisdiction of its officers, and from the common forms of law. The office of police is at Sulimpur, called also Abdulgufur ; but close by it is the market place called Fayezullahgunj, from whence the official name of the jurisdiction is derived, and near it also are a few shops called Budlugunj, by which name it is most commonly known in the country. The Commissioner, who is also Kazi for a part of the division, and for the whole of Pergunah Kahalgang, holds his courts at the same place. The Kazi of Bhagalpur has a part of this division in his jurisdiction.

Of the Hindus, who have adopted spiritual guides, four parts are under the authority of Brahman Gurus ; 24 parts are under that of the Dasnami Sannyasis ; three parts are under the disciples of Nanak ; and one part is under the Radhaballabhi Vairagis from Brindaban.

Were it in a decent state of cultivation, it is a very beautiful country; but, owing to the neglect of the proprietors, it has in many parts a most dismal appearance. The Northern extremity is low land flooded by the river, most beautifully cultivated, and adorned at each end by little hills. Within that is a fine swelling tract, in some parts rather poor, in others of most extraordinary fertility; but almost everywhere very much neglected, especially towards the East, where it is naturally most fertile. Here remain many fine old plantations, but there are vast wastes overgrown with stunted trees or bushes thinly scattered among coarse grass. Towards the S. E. is a low tract called Manihari of very rich land surrounded by hills, and finely watered, which would have been one of the finest estates that I have ever seen had decent attention been paid to its management. It contains many scattered stunted trees, but the wastes are mostly covered with coarse grass.

Some houses built by Europeans are an ornament to the country, although partly ruinous, partly devoid of architectural merit; but the natives have erected no dwelling of brick, and there are some Troglodytes, who still live in caves. There are two or three miserable brick bridges, but no public work in any degree ornamental.

Kahalgang is for this country a good small town, containing about 400 houses rather regularly and neatly built. The only other place that can be called a town is Gajarajgunj, which contains rather more than 100 huts.

There are three mosques built of brick, but none of them possesses any celebrity. That at Shahabad has been a handsome building, and had an endowment of 300 bigahs (about 200 acres), but this has lately been sold to an invalid.

Although the Ganges runs almost due north from Kahalgang to Patharghat for about eight or nine miles, and although it not only washes, but surrounds the rocks of the Vindhyan mountains, this place, which on both accounts ought to be peculiarly holy, is totally neglected, and no assembly takes place to bathe. On the contrary, the people all flock to the opposite side, where the river runs south, and the whole country is a dead level. Both Moslems and Hindus have indeed attempted to take

advantage of the rocks, that are now surrounded by the river ; and, since they have been separated from the continent, a Fakir has erected the monument of a saint on one, and a Sannyasi has found an image of Priapus on another ; but both seem silly fellows. They only go occasionally to these places, and have not resolution or resources to pass the rainy season on the spot ; and they have made no progress in bringing their rocks into a source of revenue.

At Patharghat, just where the river turns round to the east, a rock of granite projects into the channel, and has carved on it some figures of Gods ; but like those on the rocks of Sultangunj they are no longer objects of worship. They are exceedingly rude, and much defaced by time, so that in general the deities, which they have been intended to represent, can no longer be recognised. One of them seems to be Krishna and Radha. On the face of the hill East from thence, and facing the river, is a rock called Chaurasimurtisthan, or the place of 84 images. These are carvings, in very high relief representing the adventures of Krishna and Ram. The figures are between two and three feet high. There is no tradition concerning these images, nor is any worship paid to them, and the same is the case with 50 or 60 images of all sorts lying scattered about the temple of Bateswarnath, which now attracts the whole attention of the pious, and has superseded some old place of worship.

The image of Bateswarnath is a Priapus, which until lately, was poorly accommodated ; but the Dewan of the Collector has lately rebuilt and enlarged the temple. The image is supposed to have been there for many ages, and came to the place without human assistance. The priests denied any endowment, but I find, that they have 25 bigahs, with another Priapus (Burhanath), and a temple of Bhairav on the same hill, and a temple in Kodwar, of which I have given an account. The family has divided into eight houses, each of which officiates for a day in rotation, and takes all the offerings that are made, while they officiate. Almost every passenger of pure birth stops to make offerings, so that each day produces somewhat. About 1000 people assemble to worship at the full moon of Magh, and 500 at the Sivaratri.

Near the hill, on which this Priapus is situated, is the ruin of a fort called Dharhara. According to the tradition of the place it belonged to a Kshetraui Raja, named Gaurmardan, who had a daughter named Bidya Bilas, a lady of extraordinary learning, having studied grammar, and various other sciences. This lady determined to marry no one who was not more learned than herself, and having signified her intention, many princes, as might be reasonably expected, entirely failed ; but this was also the case with many Brahmans, who, neglectful of their dignity, were desirous of acquiring power even by such a low connection. At length a mendicant of the sacred order succeeded in answering all the questions proposed by the lady. He then lost caste, by marrying a woman, so far beneath his rank, and he had not long enjoyed his castle, when the great mother ( Mahamaya ) killed all the inhabitants, except one oilman, to whom she gave the whole principality. His descendants still retain a small part of it, which, from their original profession, is called Teliyagarhi.

What was shown to me for the Rajas house, appeared to be a small hemispherical hill, perhaps 50 feet in perpendicular height ; but without digging, to do which I had no convenient means, it would be impossible to say, whether or not it has been a building or a natural eminence. If it has been a building, it probably has been a solid temple, such as are used by the Bouddhists ; for no hollow building in falling can leave a ruin of such a shape. Round this heap or hill are the traces of a square fortification ; and within that the surface of the ground is covered with broken bricks. Many squared stones, one of them very long, are scattered at considerable distances through the vicinity, and I have little doubt that the older works on the hill of Pathar-ghat belonged to the same persons who dwelt at Dharhara. I have also no doubt that this is the same ruin which was represented to Major Wilford as having been a house belonging to the Karna Raja, who lived in the 12th century of the Christian era, and had a daughter that lived in a country seat near Kahalgang ( Colgong ), and was seduced by the poet Chaura ( A. R. Vol. 9, page 110 ). It is remarkable that the two monuments

referred by Major Wilford to that prince, one in Suryagarha and the other here, should have been referred by those I consulted to very different persons, while all seem to be agreed concerning the great kings of the same name. This work however is of a style which I consider as indicating a modern era. The poet Chaura, to whom Major Wilford alludes, according to the Pandit of the survey, was the son of a Raja, and stole a lady, on which account he was called Chaur ; but his real name was Sundar. He was son of Gunasindha, Raja of Kangchipur, in the west of India, so that the legends concerning that person would seem to have no connection with this district. In a poem in the vulgar language of Bengal, Barddhaman is made the field of the intrigues of Chaur ; but there is reason to suspect that this poem was written at the instigation of a late Zemindar of Krishnanagar in order to vex his neighbour Zemindar of Barddhaman.

Near this fort I was shown a tank, called Gunasagar, of considerable length but not large. It is said that among the suitors of the princess there was a certain Raja, who was an exceeding silly fellow, and could not answer a single question ; but being very handsome, the princess notwithstanding her love of science had a hankering after his person, and consented to marry him, if in the course of one night he could dig a tank, in which the water would spring ; thinking probably that by his power and influence he might have such a thing accomplished. The Raja and his people toiled all night, and made a very deep tank, but not a drop of water would appear, and the princess was ashamed to show any farther partiality.

At Kahalgang is an old mud fort, the history of which was totally unknown to those whom I consulted.

#### SECTION 13TH.

##### *Division under Thanah Paingti.*

Even were the boundaries of this jurisdiction ascertained according to the claims of the officer of police, this would be a pitiful territory ; but this has by no

means been done, and the police officer of Manihari in Puraniya claims a share of the jurisdiction over some of the islands in the river, while here the whole police of the river is considered as belonging to Bhagalpur. It is however admitted that a part of these islands pays the revenue to Puraniya, and in suits respecting property is under the jurisdiction of its Judge and Commissioners; and such parts I have marked in the map as belonging to that district. A portion of this jurisdiction is entirely detached and surrounded by Rajmahal. The remainder is a very trifling territory, with scarcely any inhabitants, and consists of two portions, one in Serkar Mungger, Subah Behar, which is surrounded and intersected by the division last described, and the other in Serkar Jennutabad, Subah Bengal. The jurisdiction for deciding petty suits has been separated into two portions, that in Behar is placed under the Commissioner of Fayezullah-gunj, and that in Bengal is placed under the Commissioner of Rajmahal, and the same ought assuredly to have been done with regard to the police. The establishment for this, notwithstanding the trifling extent of the territory and population, is larger than common, the Darogah being assisted by two Jamadars, one of whom resides with that officer at Paingti, just at one end of his jurisdiction, in a detached corner surrounded by Fayezullah-gunj, while the other resides at Ganggaprasad, near the centre of the most compact part of the district. The Darogah formerly resided there, but was allowed to retire on account I believe of the place being unhealthy, which so far as I can judge was a mere pretence. The real cause was its being inconvenient for him, as in a wild uncultivated part of the country. The additional establishment was probably formed when there were apprehensions of disturbance from the mountaineers, and seems to be now totally unnecessary.

The office of Kazi is divided into three shares exercised by the Kazis of Rajmahal and Kahalgang in this district, and of Manihari in Puraniya: the keeper, besides, of the monument of a saint at Paingti acts as Kazi for the free land that belongs to the establishment, including a considerable portion of the town of Paingti.

A Dasnami Sannyasi, who resides, and some intruders of the same sect, are spiritual guides for most of the Hindus that require such assistance. There are a few followers of Nanak, but their instructors are vagrants.

There are a few scattered hills and those of the northern tribe of mountaineers bound most of the territory on the south, and would render the scenery very fine, were the land between them and the river occupied and planted; but it is almost totally neglected, and has an exceedingly dismal appearance, being chiefly covered with coarse withered grass and stunted trees. The islands and low banks of the river, except the town of Paingti situated on the face of a little hill, are almost the only places in which there is a house; and these, as usual, are very bare, while their cultivation is less attended to than common; so that I have nowhere seen such a wretched jurisdiction. There is no dwelling of brick, nor any public building, that can in any degree be considered as an ornament.

Paingti containing about 140 houses, and Gangaprasad containing about 100, are the only places that can be called towns. The former is rather a neat thriving place; the latter seems to be chiefly occupied by impudent and querulous beggars, who live by fleecing passengers, while they carry on their plan by complaining of being plundered.

The principal place of worship among the Moslems is the monument of Pir Saiud Shah Kumal, a saint, who on his arrival at Paingti, found the place preoccupied by a Pagan Raja of the Nat tribe, who passed a life of great austerity in a cave, that overhangs the river and communicates with sundry subterraneous passages. It being impossible for two such persons to live in the same place, the saints fought, and the Pagan was slain. The Moslem then lived undisturbed at Paingti, and, when he died, was buried on the hill above the cave of his former adversary. When he had been 10 years dead, Bundugi Shah Iyusuf, at Mudinah in Arabia, had a dream, desiring him to go to Paingti, and build a monument to the saint, a school and Mosque, which he accordingly did. The present keeper (Khadem) boasts of

being the descendant of the Arab, and enjoys an endowment of 517 bigahs, which was probably intended in part at least, to support the school ; but that is entirely neglected. The monument on the top of the hill consists of the graves of the saint, of his son, of his horse, and of a tiger, covered with brick and plaster, and surrounded by a brick wall, all in good repair. The keeper says, that over the gate there was an inscription, which, about 10 years ago, an European took away by force. The infidel had scarcely removed the stone into his boat, when a storm arose, and would have sunk him, had not he thrown the stone overboard. I understood the keeper to say that the inscription was dated about the year of the Hijri 950, but my chief native assistant thought that he meant 955 years previous to the present year 1217 ( A. D. 1811 ) ; but although he no doubt understands the Hindustani language vastly better than I do, I think that he must be mistaken. I do not think that Moslem saints were here so early in repute, and fourteen graves are said to mark the whole number of the successors of Iyusuf, that have enjoyed the office of Khadem.

The mosque is at the bottom of the hill, on the right as you ascend, and has been a decent building, although of no great size. Some additions were made to it by Captain Brooke, while he was acting against the mountaineers, and it was converted into a barrack for his sepoys. The Moslems have had the good sense to despise the pollution, and continue to worship God, as if an infidel had never entered the temple.

The Mudursah or school was built over against the mosque on the left of the ascent. It has consisted of three chambers behind, with an open and wide gallery in front, extending the whole length of the three chambers. These served for the accommodation of the Moulavi, who taught, and through the day the pupils sat in the gallery to receive instruction. The roof has fallen. This school is built over the mouth of a subterraneous gallery ( Sujjah ), that is said to have led to the cave overhanging the river, in which the Hindu saint lived ; but the passage has been walled up, a rude chamber under the school having been converted into a powder

magazine, when the troops occupied the mosque. This chamber is now inhabited by a Muhammedan hermit, one of the most wretched animals that I have seen.

There is no great assembly at this monument ; but both Hindus and Moslems, residents and passengers, make offerings, the place being considered as very holy.

At Ganggaprasad is a monument of Saiud Shah Julal, a saint of the order militant. The building has been more considerable than that at Paingti, and has several inscriptions in the Toghra character ; but it is very ruinous, and is not much frequented. The keeper is a man of great austerity of countenance, but neither destitute of civility or understanding. He says that he is the eighth in descent who has enjoyed the office, but has only an endowment of 15 bigahs. The saint's head only is buried here, for being engaged in battle with the infidels when he suffered martyrdom, his head fell here, but his body stuck on the horse until he came near Rajmahal, where it was buried, as will be afterwards mentioned.

No part of the river in this division is considered as peculiarly holy ; and although almost every Hindu here bathes at each of the appropriate full moons, they almost all cross to the junction of the Kosi with the holy stream. At the festival of the God a small temple of Priapus at Ganggaprasad attracts about 100 votaries. Bishahari is the most common village deity.

Sakaragar is an old fort about four miles west from Sakarigali in the portion of this division that is surrounded by Rajmahal. It is said to have been built by a Nat Raja, proprietor of the vicinity, and to be named after his wife Sakara. It contains some brick walls surrounded by a ditch, so wide and deep, that it is called a tank (Talab), and is so clear, that the work is probably not very ancient.

At Teliyagarhi, where the hills descend close to the river, and form the boundary between the Mogul provinces of Bengal and Behar, Sultan Shuja built a fortress, which has been a considerable work, the two extreme gates being about a mile, road distance, from each other. The gates are built partly of stone, the houses within are entirely of brick. At the western gate is lying on the ground an iron cannon of extreme rudeness.

## SECTION 14th.

*Division under Thanah Rajmahal.*

This division together with the five following are intermixed in the most miserable manner, not only with each other, but with the districts of Puraniya, Dinajpur, Nator, Murshedabad and Virbhumi; and some of them are of dimensions that are quite trifling, while this, although it contains a large and very disorderly town, is stretched out to the enormous length of at least forty miles from N. to S. I have already proposed that the parts of Paingti which are in Behar should be annexed to Fayezullahgunj, and that the parts which are in Bengal should be joined to this division, and I would then propose, after adding all detached portions of districts to the Zila, by which they are surrounded, and making the Ganges and Bhagirathi the boundary, to divide the Bengalese parts of Paingti together with Rajmahal, Phutkipur, Furrokhabad, Pratapgunj, Aurungabad, and Kalikapur into four divisions, the Thanahs to be stationed at Sakarigali, Rajmahal, Beuya and Malangcha. Even reducing the size of the jurisdiction round Rajmahal to a very moderate size, on account of the trouble attending a place so disorderly, the other jurisdictions would be of a moderate size; and if made compact, most of the people would have more easy access to the officers of government than they have at present with an establishment for seven divisions, two of which have an extraordinary establishment that would become perfectly superfluous. Sultanabad, a part of Kalikapur, that is separated from Ambar, the remainder, by a wing of Virbhumi, would indeed, by the above proposed plan, be left unprovided; but the establishment uselessly employed at Chandrapur might with great advantage be employed to manage that large Pergunah.

This district is a long narrow strip, extending, as I have said, 40 miles from north to south, and for the whole of that length borders on the northern tribe of mountaineers, which shows, that the check of the police officers, in the present state of affairs, is totally unnecessary for preventing depredations from that quarter. An additional Jumadar at Sakarigali has been indeed given

to the police establishment of this division, and probably this was done with a view to overawe the mountaineers; but the southern parts of the division extend 25 miles from the residence of the Darogah, while Sakarigali is only about 15 miles north from his abode; yet the mountaineers have not shown any tendency to disturb the former quarter more than the latter. This district surrounds a scattered portion of Paingti, and two of Furrokhabad, one of which is a part of the town of Rajmahal.

The Commissioner for Rajmahal is also Kazi, and further exercises both of these offices for Phutkipur, and a part of Paingti. He resides at Rajmahal.

Of the Hindus 5 parts speak the harsh (Khotta) dialect of the west, and 2 parts the language of Bengal. Of the former 12 parts are under the guidance of 10 married Dasnami families, who reside; 2 parts follow Maithila Brahmans, of whom 30 Gurus reside; 2 parts follow the disciples of Nanak, who have 4 Sanggats; 1 part follows Ramayits originally from the West, but who have not been able to resist the flesh, and have married; and 3 parts do not trouble themselves with any instructor.

Of the Bengalese almost 2 parts follow the Goswamis of Bengal, chiefly the family of Nityananda Paribar; but some of the Vaishnavs follow the Janggali-Totas of Gaur; one part follows Brahman Pandits who conceal their sect.

In my general account of the lakes or jhils of the district I have already described those of this division, which are by far the most remarkable of the whole. The country, at a little distance from the Ganges, in general rises into little swells, and in some places into small hills, and would admit of fine plantations; but there is a great deal of land near the marshes and subject to inundation from the river, that must be always bare. As however this is a good deal intermixed with higher lands, and is extremely fertile, the whole district might be made most beautiful, as the hills of the mountaineers are everywhere in full view to diversify the scene, and the lakes add a beauty, that is uncommon in India. In its present neglected state, however, a great part of the division is extremely dismal, especially between Udhwanala

and Rajmahal, and between Musaha and Sakarigali, where it is covered with long harsh grass. There are however many plantations of mangoes and palms, with a few bamboos. The woods are all stunted.

The residence of a prince of the house of Timur, and of sundry other personages of very high importance, has left behind many buildings, that would have been highly ornamental, had they not in general fallen into ruin; and the 220 dwellings of brick, that still remain, are in general so slovenly as to impress the mind with little less regret than even the common huts of the peasantry. At Rajmahal was a large inn (Saray) built of brick by a certain Amiradul Ahutsan Khan, who was an aide-de-camp to a certain Nawab, whose name is unknown; nor can I ascertain when he lived, only that the inn was built after the house of Sultan Shuja, brother of Aurungzebe, because, ruinous as it is, it occupies part of the former situation of that palace. It must therefore be a very modern work, but has gone to entire ruin, and is no longer capable of affording shelter. It has at best been a very sorry work, being a square surrounded by about 100 wretched dark unventilated hovels. Two immense gates, out of all proportion to such accommodations, and totally useless, must have served to render the disappointment of the traveller more complete.

The only two other public works at all deserving notice, are two bridges of brick: one at Udhawanala, said to have been built by Kasem Ali, and another towards Pirpahar. They are both small, and exceedingly rude; and, although still of use, are fast hastening to ruin.

Major Wilford seems to have been able to find some authority for considering Rajmahal as a place of note in great antiquity, and says, (*Asiatick Researches*, Vol. 9, page 34) that Balaram, the brother of Krishna, after his wars with Banasur, whose residence is still shown near Puraniya, (Purneah) built Rajagriha or Rajamahal, on the banks of the Ganges, which must not be confounded with Patna, the Rajagriha of Jarasandha. I presume, therefore, that Major Wilford means our Rajmahal, which in fact is at no great distance from the city of Banasur, that I have described in my account of Dinajpur; and near Puraniya I have not been able to trace any work attributed to that

hero. The Pandits, however, whom I consulted allege that Balaram never was a Raja, and as a descendant of Jadu could not pretend to that distinction, and the inhabitants universally attribute the name of Rajmahal to a very modern period. They say, that Man Singha, when sent by Akbur to settle the affairs of Bengal, selected this as a situation for building a house ; and he had begun to build one, the ruins of which are still shown, and had begun to erect a temple, when Futehjung Khan, who had the management of the neighbouring country, wrote to the King, that Man Singha was erecting a palace, which all the Hindus called Rajmahal ; that although an officer of the king, he was profaning the town by building a palace of idolatrous worship, and was evidently meditating insurrection. Man Singha had timely information of this letter ; and knowing his danger, immediately issued an order, that the new town should be called Akburnagar, and that the temple should be changed into the great place of assembly for the faithful, and called Jomma Musjed. The king receiving intelligence of the Hindu's loyalty, at the same time with the complaints of Futehjung, considered them as malicious. The Hindu and Moslem chiefs lived afterwards on very bad terms, and at length their followers came to blows, and a battle ensuing the Moslem was killed. There is no doubt that Akburnagar is the name by which this town is called among the Moslems ; but as usual the Hindu title has prevailed. I must, however, observe, that the people of Bengal are apt to attribute a vast many things to Man Singha, in which, I suspect, he had no concern ; and that the mosque called Akburabad was undoubtedly built by Futehjung Khan, who probably, therefore, gave the name of Akburnagar to the city. I suspect, therefore, that the name Rajmahal is older than the time of Akbur ; although I must confess, that, after a most careful investigation of the place, I have not been able to find any traces of considerable antiquity, nor have I been able to learn one tradition concerning any Raja, by whom it was formerly occupied. Before the arrival of Man Singha, however, it appears to have been a place of note, as being the residence of Futehjung Khan, who from the size of his works has evidently been an officer of distinction. The

Akburabad mosque, although not very large, has been a very neat work; some chambers, and a gate of his house remain, which show it to have belonged to a person of rank; and his tomb is equal to that of the persons of highest dignity, that are buried in the vicinity, and have been works of considerable elegance. It is, however, very probable, that Man Singha killed Futehjung; for bloody feuds between officers of the same government, in the general opinion of the natives, are considered as of little importance, and I suspect, even in the best periods of the Mogul government have not been uncommon.

The house of Man Singha called Huduf, is shown, and has been partly built of stone; but it would not appear to have been a palace sufficient to excite the jealousy of Akbar. [The Jomma Musjed] is however much superior to the mosque of his rival, and by its magnitude seems intended to have acquired the confidence of the faithful. Although very inferior in size to Adinah, which I have described in my account of Dinajpur, it seems to me constructed with vastly more taste, and far surpasses any of buildings that I saw in Gaur. I have therefore given a ground plan and elevation (Drawings No. 11 and 12). Its outline pleases me vastly more than that of any large native building, which I have seen in the course of this survey; but in this district some of the smaller buildings of the Moslems are certainly in a better taste. The execution of the Jomma Musjed is however exceedingly rude, whether considered as a mere piece of masonry, or in the delineation of the smaller numbers of the building. The great temple on the inside, exclusive of the small chambers at the end, measures 188 by 60 feet, which will serve as a scale for the drawings. This building has no endowment, is fast hastening to ruin, and is no longer a place of worship.

Rajmahal, during the whole time of the Mogul government continued a place of importance, although I was not able to trace the succession of its governors, the people being sunk into the most brutal state of dissipation and ignorance. It was however raised to great eminence by being made the residence of Sultan Shuja, son of Jahangir, who governed both Bengal and Behar, for being the capital of which it is admirably situated. This

prince at first took up his residence in the palace of the kings of Bengal at Gaur, which to his ancestor Homayun had appeared a paradise; but what appeared in that light to the hardy Tartar, was probably considered by his luxurious descendant as a dungeon; and even for his temporary residence it became necessary to erect a building of greater splendour. This, now called the Sunggidalan or stone hall, although in a miserable state of ruin and dilapidation, still contains traces to show that by its magnitude and numerous accommodations it was fitted for the abode of any prince; and a view of it evinces the height of magnificence to which the family of Taimur had arrived, when such enormous buildings were required for the temporary accommodation of one of its sons, when employed at a distance from the capital.

A vast deal of the building has been pulled down for its materials, especially for its stones, which have been employed to erect the palaces of the Nawabs at Murshedabad; and much has been removed to make room for modern hovels; but a survey of the remains, and the accompanying sketch (Drawing No. 12) will justify what I have said. Near the ruinous inn, which I am assured occupies part of the situation of the palace, may be observed two gateways (AB) which, as usual in Muhammedan buildings are very large and handsome. Entering by the eastern one (A) the visitor probably came into a court, in the centre of which was an octagon reservoir for water (C), each side 32 feet in length, and constructed of brick. The water was conveyed to it by a narrow canal of the same materials (F), which seems to have been formed in the middle of an elevated walk, that led by the right of the court to the interior of the palace. On this road, at no great distance from the reservoir, has been a smaller gateway (D) leading into another court (EEEE), which was nearly square and extended to the wings of the principal court of the palace. This court is intersected from north to south by the road, and no remains of buildings can be traced, although some probably existed.

The great court of the palace was surrounded on three sides by buildings of brick, two stories high, which consisted of a great central building (NN), with two

great wings (GH), connected by four lower ranges (M L I K). The central building had before it a terrace (OO), in the middle of which was a square reservoir (P), from whence the water fell into the canal, and was conveyed into another octagon reservoir near the entrance of this court, from whence again it passed through the canal into the reservoir (C) in the outermost court. This great central building, evidently the most ornamented part of the whole, was in the upper story divided into three apartments, a large one in the centre, and a smaller at each end; but the three rooms communicated by very wide and lofty arches. The lower story of this must have been very dismal. Under each end room it is divided into two by a longitudinal wall; under the centre it is first divided into four by transverse walls, and then the two middle divisions are each subdivided into two. The interior decorations of this building can no longer be traced, but the plaster on the outside has contained wreathed mouldings in a good taste. Each of the two great wings on the upper floor, has been divided into three chambers as in the centre, only smaller. The lower buildings (I K L M) by which the three great ones are connected, have been subdivided into a vast number of apartments, that, owing to rubbish, dirt, and disgusting and dangerous reptiles, it would be difficult to trace. Between the farther buildings of this great court and the river has been a row of apartments, or at least arched passages (QQ), communicating on one side with the lower story of these buildings, and on the other with a terrace (RR) overhanging the Ganges, which is called the Tukht. The greater part of this has been undermined, and has fallen into the river in immense masses, so that the form in the plan is laid down, from what I judge it may have been from some fragments that remain entire, but are not sufficient to enable a plan to be traced with accuracy. At the east end of the row of buildings (QQ), is a great well lined with brick, through which the river water was raised by machinery to supply the palace, and the jetdeaus, that were undoubtedly in the reservoirs, of at least the great court; and into which the natives imagine that the ladies of Sultan Shuja threw themselves with all their ornaments, when he fled before the victorious troops.

of his brother. The great court of the palace is considered by the natives as having been the ladies' apartment; but I am convinced that it is a mistake, as I shall afterwards have occasion to show. I see nothing about these buildings marking that cautious jealousy with which the Muhammedans watch this precious commodity. I am persuaded that the great court is the place where the public entertainments were given, and all round the cornices of the buildings are fixed rings of stone, to which the sides of a canopy could be fixed, so as to shade the whole court.

Returning to the reservoir where we first began, and passing through the gate (B), the visitor comes into another court, where most of the buildings have been destroyed, having probably been small places or huts, for the accommodation of troops; but turning to the right, you come to a gateway of considerable size (*a*), which is called Mojragah. Immediately within this is another great court, having in front of the gate an elevated terrace (*c, c, c, c,*) on which is erected the Dewan Khanah, where the Sultan and his officers sat to administer justice, transact business, and give audience. Those who were admitted to this honour, began their prostrations at the Mojragah, and continued frequently to repeat them as they advanced to approach as near the royal person as the etiquette permitted. The Dewan Khanah (*bb*) is the part of the building that is in a state most fit to give an idea of the whole, the walls being entire. It is true, that the cornice has been injured by a new roof added by Mr. Dickson, who covered the building, then very ruinous, and has preserved it as a treasury, for which it still serves, although it has again become ruinous. It consists of an open gallery extending the whole length of the front, and behind this of three apartments which are very dark. This building is only of one story, and next to the central part of the first great court, has, no doubt, been the highest finished part of the whole. The view of its front (Drawing No. 14) will probably induce the reader to conclude with me, that whatever may have been the magnificence of the palace, its elegance was on a very confined scale; and this will be farther confirmed by 15th drawing, which represents the finishing of one side of

the room (*d*), at the east end of the Dewan Khanah, where the original plaster remains perfectly entire.

The east side of the court of the Dewan Khanah is shut in by the buildings (G I), which form the west side of the grand court ; and the covered gallery (QQ) extends so far along its back as to form a communication with the back of the Dewan Khanah, and with a low terrace (*ee*) between that and the river, to which at its East end there is a descent by a small stair (*f*). On the right, entering the court of the Dewan Khanah, is a small square terrace (*g*) on which, it is said, the officer called Dewan sat, while the Sultan gave audience, but it does not seem suited for such a purpose, as it appears to have had no shelter.

The east side of the court of the Dewan Khanah consists of a low range of buildings (*hh*), which communicates with one consisting of two stories (*i*), the upper as usual, divided into three apartments. This has no windows towards the court of the Dewan Khanah, but behind it is a small room (*k*), which has a door towards that court, and communicates by a passage (*l*) with the interior of the building. On the outside of this passage facing towards the gate and guard room (*a*), called Mojragah, are niches, apparently intended for the accommodation of a guard. This passage seems to me to be that by which the prince passed into his ladies apartments ; and these, I presume composed a third court, bounded on the east by the buildings (*h, h, i.*) of the court of the Dewan Khanah, and on the West by a similar row, of which the greater part has been removed, to make room for a bungalow built by an European ; but the building (*n*), which formed its end most remote from the river, still remains, and is exactly similar to the one (*i*) opposite to it. If this was really the abode of the ladies, large walls no doubt surrounded it ; but of these no traces remain. Towards the river this interior court had some small buildings, two of which are still pretty entire, but so much transformed and concealed by the additions of some Goth, that their original form can be scarcely traced. The one most highly finished is a small oratory (*o*), 18 feet by 12 on the inside. Its front consists of white marble tolerably polished, and neatly inlaid with pious

sentences in black marble. The minars or columns at the corners have been built into the walls of a room, where the Goth probably swilled cool claret, and which from its neatness would have deserved some credit, had it not totally destroyed the face of the building against which it was erected; for these minars are the most ornamental parts of Moslem temples. The interior of the oratory has been totally preserved, but has always been clumsy, the marble extending only a little way up the walls. The only injury that the interior of this chamber has suffered, is that in repairing the roof, the Goth has removed the ceiling, and left the beams staring in all the bareness of Anglo-Indian architecture. The other parts of the outside he has also completely changed, by adding a bath to one end of the oratory, and by whitewashing the whole; but the rain has begun to remedy this, and shows that the outside has been painted, and enamelled with very gaudy colours. East from this oratory, and overhanging the river, is a small building, where the prince and his ladies are said to have sat while enjoying the fresh air that blows from the water. This originally consisted of three long narrow apartments, which the Goth to increase accommodation, has divided into five. That in the centre was open at the sides, where the roof was supported by little clumsy pillars and arches of black marble; but it has a pleasant situation, and the ceiling has been very neat. The two end apartments were very long with small windows, through which alone the ladies were probably allowed to peep. These have been cut down to the floor and enlarged, so as to admit a ventilation necessary in such a climate for European existence, and the whole has been surrounded by an open gallery, which added much to the comfort of the accommodations, but was not much suited to the taste of the original building, which in fact should have been left undisturbed; and the gentleman might have been much better accommodated, and on more reasonable terms, by a building entirely new.

Although the palace derives its name from stone, no great quantity of that material seems to have entered its composition. The doors, windows, and a row next the foundation of the chief part, seem to have been the whole, and the removal of these by cutting them out of

the wall, seems to have been what has principally reduced a very strong and massy building to such a wretched state of decay.

At a considerable distance S. W. from the Sungidalan is a ruin called the Phulvari, or flower garden, which some attribute to Sultan Shuja, and others to a Hasunali Khan, who was Faujdar or governor of the place since the time of that prince. It consists of several brick houses, each of such a size as is usually occupied by the chief European officers of the Bengal Government residing in the country, and placed at some distance from each other, in a fine grove of mango trees. Its size is no doubt suited for the abode of a person of high rank ; but it retains no traces of elegance.

*Phulvari*  
Near this is the tomb of Bukht Homa, widow of a Shayesta Khan, who is said to have been an aid-de-camp ( Mosaheb ) to Aurungzebe. It is certainly the building of best taste in the place. A square space, containing perhaps three acres, has been surrounded by a neat brick wall, consisting of a series of arches filled up by a small thickness of wall, which produces a very neat effect, and saves materials. At each corner is a neat octagon building, the lower story as high as the wall, the upper covered with a dome, and having in each side a wide arched window. In the middle of one side is the entry by a lofty, wide, and handsome gate, which is arched and ornamented with a dome and minarets. The area is planted, and in the centre is the tomb, which is square, with an open gallery of three arches on each side and a small chamber at each corner. The building is adorned at the corners by four minarets, too low, as usual here, but in other respects neat. The tomb in the centre is covered by a dome of brick ; and each of the corner apartments is covered by a wooden cupola with eight windows. These cupolas, the upper parts of the minarets, and the whole cornice are painted with very bright colours. On the cornice, especially, is a row of fine blue Iris, very gaudy, but exceedingly stiff. Although this tomb has a considerable endowment, it is fast hastening to ruin, and the condition of the ground is exceedingly slovenly.

Some way south from thence is another monument, nearly on the same plan, but not so fine, although I was told by the keeper that it contains the remains of Merza Muhammedbeg, Subah of Bengal, and father of Alaverdi Khan who succeeded to that high office.

South a little from thence was Nageswarbag, a palace built by Kasem Ali, Subah of Bengal, and which seems to have been intended entirely for a luxurious retirement among women, as it contains only one set of apartments, within which most assuredly no man but himself could have been admitted. The situation is remarkably fine, on a high ground commanding a noble view of the great lake, of the hills, and of a very rich intermediate country. The building has been large; but, so far as I can judge, very destitute of taste. It consists of an immense wall of brick, perhaps 30 feet high, and 500 feet square. At one corner is an aperture by way of entrance, fortified without by walls and guard rooms, which were intended for eunuchs; the places for the guard of cavalry being without. All round the inside of the wall ran a row of apartments, each consisting of a small court open above, and surrounded by small dark hovels, like pigeon holes, in which the ladies and their female attendants might have been crammed. The roofs of these apartments formed a walk, concealed by the upper part of the wall; but there are in this some small holes through which the ladies may have been allowed to peep. These apartments communicated with each other by an arched gallery, which surrounded the interior court. In the centre has been a square building, chiefly of wood, somewhat like the garden house of Hyder at Seringapatam. It was called Rungmahal, or the painted hall. The outside of the wall seems to have been surrounded by a row of sheds, which it is said were intended for the accommodation of a guard of cavalry, and of the male domestics. Kasem Ali never occupied this house, having been put to flight just as it was finished. Some troops, that soon after came to check the incursions of the mountaineers, took up their quarters in and near it; and, although built only 57 years, it has been rendered a complete ruin, by taking away the timbers of the roof to build the house of the Nawab Rokunuddoulah, who lives at Rajmahal.

In the town is the tomb of Mirun, eldest son of Jafurali, the successor of Kasem. This young prince was killed by lightning. His tomb is in the same style as the others, but inferior in size. Some attention is, however, paid to keep it neat, as many flowers are planted in it, and as the remainder is cultivated as a kitchen garden; and even onions and carrots look better than the rank weeds that usually spring in such places. These are the principal monuments in or near Rajmahal but there are many small mosques and monuments too numerous to be mentioned here, although in other parts of the country I have noticed some that are of less size; because, from the scantiness of anything except hovels in their vicinity, they have become of importance in the eyes of the people who have seen no better. Rajmahal has no doubt greatly diminished since it was the seat of the government, which ruled the whole of Bengal and Behar; it has lost even in consequence since the courts have been removed from it to Bhagalpur; still, however, it is a large place; but the ruins and the scattered manner in which the town now stands, renders its appearance very dismal. The officers of police maintained, however, that it still contains 20,000 houses and 50,000 people, but even the latter seems greatly exaggerated, although it is in no proportion to the number of houses which they state. On inquiry, I found that it still contains 12 market places, Neyamutullah-bazar, Kachha-saray, Kutra, Matsyabhuwan, Sirsigali, Kasemgunj, Sufiya-bazar, Gudagunj, Imam-gunj, Pirgunj, Ratnagunj, and Saiud-bazar, scattered over an immense extent. On applying to the owners for an account of the people belonging to these market places, they gave me a list of 1285 houses; but this is probably as much diminished as the other account is exaggerated. Besides, in villages scattered in the places between these market places, there are a great many houses, so that I do not think that the population can be less than from 25 to 30,000 persons; and the number of travellers by land and water is generally very considerable. The supply of these with necessaries is, indeed, the chief support of the town.

Atapur, containing about 500 houses, and Kaligunj, containing 600, are the only other places that can be called towns.

About ten or twelve thousand Moslems, in celebrating the memory of the grandsons of Muhammed, carry the pageantry to Nageswarbag, probably considering Kasemali as their last prince, and regretting his overthrow, as is undoubtedly natural. All the mosques are ruinous, although a few have endowments. On a hill overlooking the Ganges, some miles above the town, is buried the body of Saiud Shah Jubal, whose head is interred at Ganggaprasad, as already mentioned. The buildings here are in tolerable repair, and pretty large.

No particular part of the river is reckoned uncommonly holy, but vast numbers bathe at the three full moons, without any great assembly forming at any peculiar place. The Hindus have 25 temples of brick, considered as places of public worship, but no one of them is large nor possesses celebrity. At Motijharna, on the hills, is a stone in a cave, which although it wants the shape of Priapus is called a Lingga, and about 300 people assemble on the Sivaratri, but no priest thinks it an object worth securing. The same is the case of a Priapus which is supposed to have placed itself under a tree at Nimgachhi, and where about 500 people usually attend the festival.

The most common village deities are Kali, Vindhya-basini, Chaldevi, and Rakshasi; the two latter are deities of the hill tribe.

This is universally allowed to belong to Gaurdes and to the Mogul province of Bengal.

On the subject of antiquities I have nothing further to add.

#### SECTION 15TH.

##### *Division under Thanah Phutkipur.*

This is a most pitiful jurisdiction, but by having been contrived in the form of a cleaver, and by having the office of police placed at one corner, some parts are removed to a good distance from the inspection of the native officers. The decision of petty suits is left to the Commissioner of Rajmahal, to whom indeed this division lies more conveniently than a great part of the jurisdiction in which he resides. The same person is also Kazi.

Thirteen parts of the Hindus use the dialect of the west; three parts speak the Bengalese language. Of the former, two parts follow Brahman Gurus of the Sakti sect, eight parts follow vagrant Dasnami Sannyasis, two parts follow the disciples of Nanak, and one part reject religious instructors. Of the Bengalese, one part follow Brahman Gurus who do not reside; two parts are Vaishnavs, mostly under the guidance of the descendants of Nityananda, who reside near Junggipur, but a few under that of the Janggalitolas of Gaur.

Part of this division pays its revenue to the Collector of Bhagalpur, and part to the Collector of Puraniya.

At the northern end of this division is one small hill, and a long marsh extends along its western side. The greater part of it consists of land, that is constantly undergoing changes from the action of the Ganges, and very bare, although fertile, and tolerably cultivated. The inland part, belonging mostly to invalids, is miserably neglected, and exceedingly dismal, being mostly covered with long harsh grass. There is no dwelling house of brick, and no public work deserving notice.

The police office is in a small village named Surfurazgunj. The only places that can be called towns are Serasin containing about 600 houses, and Begumgunj containing about 100.

Two monuments of brick have been erected to the memory of Shah Ali and Shah Auliya, Muhammedan saints. People come from ten or twelve miles round to make offerings.

The Hindus have no place of worship at all remarkable. They all bathe in the Bhagirathi on the three full moons; but, no one place being considered as peculiarly holy, no great assembly is formed.

The most common village deities are Kali, and one who, being anonymous, is called the Grama Devata.

The whole is admitted to have formed a part of Gaurdes, and of Subah Bengal.

Along the northern boundary Kasemali, on coming to a rupture with the English, built lines to prevent their reaching Rajmahal, where he intended to reside, and which is undoubtedly a situation easily defended. Whether or not he intended to complete the lines by

extending them to the hills is doubtful. In the state in which they were attacked and carried by Major Adams, they could be of use only in the rainy season, when the attack was made, as between their right flank and the hills there is an extensive tract of rising ground. The lines are now a complete ruin, and very few traces remain of the approaches that were made in the attack, and which would seem to have been of no farther use than to make the defenders imagine themselves secure from an attack by storm, by which the works were in fact carried.

#### SECTION 16TH.

##### *Division under Thanah Furrokhabad.*

This also is a very petty jurisdiction, of much such a strange form as Phutkipur. It surrounds a detached part of Aurunggabad that is situated close to the Thanah, while two detached portions of this are surrounded by Rajmahal, one of them in the town of that name. Beyond the great Ganges it possesses two portions, one of which is on the environs of the old city of Gaur.

The Darogah resides at Furrokhabad, which in such a shaped territory is as convenient as any other situation. There is no regular court for the trial of petty suits. For the most trifling cause a Vakil must be employed at Bhagalpur, and all the expense of a regular suit before the Judge must be incurred. The cause would then be referred by the judge to an officer called Sales, who, as natural enough, complains that he is very rarely employed.

The office of Kazi is at present disputed. Kodurutullah, who resides near Bhagwangola in the Murshedabad district, has here a deputy and six Mollas; but their authority is contested by Naderali Kazi of Rajmahal. Mir Muhammed, who resides at Bhikhanpur in this division, enjoys without dispute the office of Kazi for four villages.

Of the western tribes of Hindus four parts are pupils of Maithila Brahmans residing in Puraniya, eight parts of Sannyasi vagrants, one part of vagrant disciples of Nanak, one part of Ramayit Vairagis, who have not been able to resist the flesh and have married, and two parts

are not worth instruction, and receive none. Of the Bengalese Hindus two parts receive instruction from the Brahman Gurus, who conceal their sect and only part of whom reside, and fourteen parts are under the guidance of those who openly profess the doctrine of Madhav. Acharya Puribar keeps here two Gomashtahs, the family of Nityananda keeps an Adhikari to manage its affairs, and some vagrant Vaishnavs are employed; none of those, who reside, are employed as instructors. The whole of this district is level; and some of it, owing to the changes produced by the Ganges, is rather bare; but in general it is tolerably occupied, and, where exempted from the influence of the river, the villages are finely sheltered with trees and bamboos, as in Bengal.

This division pays its revenue to the Collector of Murshidabad. There is no house, nor temple of brick, nor any public work, that deserves notice. Kharidangra and Jamur, containing each about 100 houses, are the only places that can be called towns.

The two most remarkable places of worship among the Moslems are the monuments of Janggali Pir (the anonymous saint of the forest) and of Saiud Murdun, both constructed of clay; but they are the property of servants (Khadems) who are endowed, and many Moslems and Hindus make offerings.

The Bhagirathi is the only place of worship of note among the Hindus, but no part is peculiarly holy, and the people seem rather lukewarm, few going there on more than one of the full moons.

There is no remains of antiquity. The whole is considered as having belonged to Gaurdes, and to the Mogul province of Bengal.

#### SECTION 17TH.

##### *Division under Thanah Pratapgunj.*

This is a petty jurisdiction, forming a long very irregular strip between two portions of Aurunggabad, and situated on both banks of the Bhagirathi. It contains two detached portions of the Dinajpur district, one of them of two or three bigahs close by the Thanah; and it hems in, between it and the great Ganges, some parts of

the Puraniya district. Eight detached portions of it are surrounded by Kalikapur, and seven by Aurunggabad, while another detached portion is hemmed in between angles of Aurunggabad, Nator, Puraniya, and Murshedabad.

The office of police is at Shumshergunj, on which account the district is most commonly known by that name. The Commissioner resides at Deonapur, a village of which one half belongs to the division of Aurunggabad. The whole revenue is paid to the Collector of Murshidabad.

The office of Kazi is performed by the deputies of two men, one of whom resides at Rajmahal, but is not the Kazi of that place. The other resides in Aurunggabad, and his acting deputy is totally unnecessary, the two divisions being totally interwoven, and both united would not make a large jurisdiction.

Ten parts of the Hindus are of western tribes, and six parts are Bengalese. Of the former, six parts receive instruction from the Dasnami Sannyasis, two of whom reside, but are annoyed by vagrants; eight parts are instructed by Ramayitis, of whom there is a convent, the chief of which has abstained from marriage, yet many vagrants intrude; one part follows Nanak; and one part receives no instruction.

Of the Bengalese one part is under the Brahmans, who conceal the sect to which they belong; fourteen parts follow the Goswamis of Bengal; and 1 part is totally neglected.

This country is all level, and a great part of it inundated; but except in new-formed land, the villages are finely sheltered with trees and bamboos, and a very few palms. It contains several small lakes or marshes, that never become entirely dry. The largest are at Chandakuri and Tarapoor, the former containing 1500, and the latter 1000 Bigahs. It contains seven private buildings of brick, partly dwelling houses, partly chapels. There is no public work of any note.

Shumshergunj, containing about 200 houses, is the only place that can be called a town.

The place of worship most noted among the Moslems is the monument of a saint, named Mortuja

Shah Anund, at Sutigram. The building is of brick, and in good repair, the keeper being the religious guide (Pirzadah) of the Subah of Bengal, and very rich. He expends a good deal on religious mendicants, and is son of Nurshah, a man very eminent for the holiness of his life. The tomb of Shah Julal Saheb, at the Thanah, has become quite a ruin, but both Hindus and Moslems make offerings.

No part of the Ganges within this division is peculiarly holy, and the people are very lukewarm in its worship; for one half of them at least every year neglect to bathe at all the three full moons. At Chandpur is an image of Kali, made of clay, which is attended every Tuesday and Saturday by about 200 people, Hindus and Moslems; and on each occasion from 20 to 25 goats are offered. At Chauka is a stone image of Katyayani with ten arms, and riding on a lion. Both Hindus and Moslems assemble, as at the worship of the Kali at Chandpur, but not in such numbers, nor so well provided with offerings.

The most common deity of the villages is Kali.

This is universally admitted to belong to Gaurdes, and to the Mogul province of Bengal. It contains no remains of antiquity.

#### SECTION 18TH.

##### *Division under Thanah Auranggabad*

This petty jurisdiction is divided into two unequal shares by Pratapgunj, and the office of police is situated in the smaller, at a place called Manggalpur; for Aurunggabad, from whence it derives its name, is in Pratapgunj. It surrounds seven detached portions of that division, and a part of Puraniya, while six portions of it are surrounded by Kalikapur and sixteen are scattered through the district of Virbhumi, one of which is removed fourteen or fifteen coses from the eye of the Darogah. One commissioner serves to decide the petty suits of this division and of Kalikapur and lives at the latter. The Collector of Murshidabad receives all the rents.

The Kazi lives at Rajmahal, and acts by deputies, of whom he has appointed two.

Of the Hindus, twelve parts are Bengalese, and four parts are of western tribes. Of the Bengalese, two parts follow the Brahmans, who conceal their sect, six parts belong to the family of Nityananda; two parts follow the Adwaita family, and two parts follow Acharya Paribar. Of the western tribes, one part follows the Dasnami Sannyasis; one part the Ramayitis, all of whom have married; and two parts have no instructors.

The country resembles the division last described; but contains no marsh nor lake worth noticing.

There are two dwelling houses of brick, but one of them is ruinous. Five persons have brick chapels within their premises. There is no public work that is at all ornamental.

Jafurgunj, containing about 100 houses, and Kaligunj containing about the same number, are the only places that can be called towns, although Manggalpur, which contains about 60 houses, might be considered as a part of Kaligunj, as the two places are nearly adjacent.

The Moslems have no place of worship worth notice.

No part of the Bhagirathi is peculiarly holy, but the people are more regular in their attendance at the full moons than in the two last divisions, which would seem to arise from their being at a little more distance from the river, so that their attendance is more troublesome. At Duliyan about 5000 people assemble on the first of Vaisakh. Some bring with them small images (Bigraha) of Krishna and Radha, to which they pray; but the assembly, as usual at fairs, is chiefly employed in buying and selling, gaping at strange sights, and attending to the singing and dancing of musical boys, many of whom attend. At Kaligunj such another fair is held, on the last of Vaisakh, at a hut where there is an image of a male God named Sarbeswar.

The most common village deities are Kali, the anonymous Gramadevata, Manggalchandi, and Krishnachandi; but in the western parts Chaldevi, a deity of the hill tribes, is in fashion.

This is universally admitted to belong to Gaurdes, and to the province of Bengal.

At a place called Karnagram are some stones, bricks, and other traces of buildings which, some people say

was a house of the Karna Raja, who lived near Bhagalpur; and that the name of the place was originally called Karnapara. The Zemindar of the place, although he allows that there has been some building, had never heard of such a personage as Karna Raja.

At Mahishali, Basudevpur, and Tangtipara are three tanks, which many allege to have been dug by Mahipal Raja; but on the spot I found the first attributed to a Mahes Raja, a person of the low tribe of Tiwars, to whom this part of the country is said to have at one time belonged. The greatest length of this tank, being from East to West, it has in all probability been dug by a Moslem. The people again of Basudevpur attribute both their tank and that of Mahishali, to Viswakarma, the God of artists, who instructed the Chinese and Europeans in all their arts. The tanks are far from being worthy of such a personage.

At Manggalpur are some ruins, apparently those of a small town, which is generally admitted to have been the residence of a son-in-law of Lakshman Sen, King of Bengal. Some of the neighbouring Zemindars, as will be afterwards mentioned, claim a descent from this person. Among the small tanks and heaps of rubbish is a small piece of water called Jivatkunda. Formerly, it is said, any dead body might have been restored to life by being thrown into this pond; but, since the country has become subject to infidels, the water, it is certain, has lost its virtue. It is also imagined, that in this tank there is a throne of stone (Merh); but in December, when I visited the place, it was not visible: the people said, that it would be seen in spring, when there would be less water.

#### *SECTION 19TH.*

##### *Division under Thanah Kalikapur.*

This, although in a wretched state of cultivation, is a jurisdiction of decent size, but it is divided into two unequal portions by a corner of Virbhumi, which projects, and unites with the territory of the northern tribe of mountaineers. I have already proposed that the northern portion of this division should be united with

the last six mentioned divisions, all inextricably intermixed, and formed into four new ones of decent size. The remainder, or Pergunah Sultanabad, containing almost 200 square miles, might have annexed to it some projecting corners of Virbhumi, and thus form a jurisdiction of tolerable size ; but it should in fact be annexed to Virbhumi, not only as the residence of the judge and magistrate of that district is nearer than Bhagalpur, but is vastly more accessible; and besides the people almost universally are Bengalese, while at Bhagalpur the Hindustani dialect and customs prevail. As it stands, the division consists of two portions separated by Virbhumi, and each of these again consists of a small space well cultivated, and of a great tract almost totally neglected. The officer of police and Commissioner reside in the smaller portion, one in Kalikapur, the other at Amarpur, about 13 miles distant. Six portions of other divisions are scattered through this, while four detached pieces of the larger portion are scattered through the Virbhumi district.

The Kazi resides at Rajmahal, and acts by deputy, which seems a great error. Formerly each Pergunah had a Kazi, and shared his profits with the Zamindar, which I suspect is a common practice, wherever, as usual in this district, these officers are attached to Pergunahs, and not to divisions. Mr. Fombelle, while judge here, is said in this instance to have remedied the evil.

Of the Hindus, who are mostly Bengalese, one-fourth are of the Sakti sect and follow Brahman Gurus, that do not publish their sentiments, three-fourths are guided by the Goswamis of Bengal, chiefly (8 parts) of the family of Nityananda, but three parts follow the family of Adwaita, and one that of Acharya Paribar.

I have said that this division consists of two portions. One is well cultivated, chiefly with winter rice, and finely planted with mangoes and a few palms, but no bamboos. The villages are more naked than is usual with those inhabited by Bengalese. Another portion is almost in a state of nature, and mostly covered with forests, which are kept stunted by frequent cutting for fire wood. A little towards the N. E. is inundated, but in general the land is high though level. All Ambar is free from

hills, but there are a few scattered through the wastes of Sultanabad.

Both of the Zemindars have some brick buildings in their houses ; that of Ambar is very decent, and is gradually improving by additions, made as the owner can afford. Several farmers have small brick places of worship, which they keep in neat order.

There is no place that can be called a town. Virkati is the largest; nor is there any public building that deserves notice.

The saint who seems to be in greatest request among the Moslems is Dewan Mulek Kotub Shah. At Manirampur he has a tank, in which are sundry alligators, who will accept of a kid or a fowl from any fortunate person, but refuse, it is alleged, the offering of miserable sinners, over whom misfortune is hanging as a punishment for their wickedness. The same saint has a monument of brick at Ashukpur. At Jagannathpur is a neat monument of Shah Maymuddin, together with an Idgah or oratory, repaired lately by a farmer, and situated in a small square fortress, with bastions at the corners in the Mogul fashion.

The Hindus have no place of worship at all remarkable. In the open country Kali is the common village deity ; towards the woods her place is supplied by Chaldevi, Bidhumata, and Sarbamanggala,

This is a part of the Mogul province of Bengal, and the oldest denomination for their country which the people know is Rarh, which as I have said in my account of Dinajpur, is one of the provinces into which the Hindu kings of Bengal divided their territory.

Near Virkati are many small tanks, as if there had been a considerable town; but I see no traces of buildings, nor is there any tradition of a town having been in that situation.

#### SECTION 20TH.

##### *Division under Thanah Chandrapur.*

In the year 1796, many robberies having been committed in Virbhumi, then under the magistrate of Murshidabad, and it being pretended, that the perpetrators

belonged to the southern tribe of Mountaineers, Mr. Brooke, then magistrate of Murshidabad applied to Mr. Fombelle, then magistrate of Bhagalpur, to check the inroads. Accordingly a Thanah was established at Chandrapur, and a small portion of Virbhumi was placed under the superintendence of a Darogah. It is said that the judicial authority was also transferred, while the revenue continued annexed to Virbhumi: but as the place is within an easy day's journey of the courts at Virbhumi, while to Bhagalpur is a long, difficult, and dangerous route, no attention has been paid to such changes, if in reality they were made. The Darogah is a very quiet, civil man, and has absolutely nothing to do. The hill people and their country, over which he is intended to watch, are both totally unknown to him, nor is there the smallest use for his presence, which as I have said might be with advantage transferred to the superintendence of the southern portion of division Kalikapur. The fact, so far as I can learn, is that two Ghatwals, or Thanahdars, as these are called in Virbhumi, men who were allowed 1260 bigahs of land to keep up an establishment for the support of the police, began to plunder, and in order to conceal their villainy inveigled some hill people to join them, especially in receiving the fruits of their industry, and in concealing it in the hills until it could be sold. They boldly attributed everything to the poor mountaineers, and their conduct was not discovered until the superintendent (Suzawul) went to seize on these people. Due information having been received, the two rogues with about sixty of their adherents were caught. One of them, and a hill chief having been hanged, and the other having been confined for life, everything has since been quiet, nor is it likely to be ever disturbed, unless too much indulgence shown to such villains should induce them to throw off the fear of the gallows, for which many of them are by propensity fit.

#### SECTION 21ST.

##### *Division under Thanah Lakardewani.*

This is an enormous jurisdiction, that would require the attention of at least two sets of native officers, one of

which might remain at Nuni, where the office of police is now established, and the other might be placed on the Tepara river, somewhere about Kanghiya. To the former should be annexed a tongue of Virbhumi, which projects far north from Tiyur into the heart of this district. As I have said, however, one magistrate would be quite adequate for both districts, were he placed in a centrical situation. Lakardewani, where the Thanah was originally placed, is in a much more centrical situation than Nuni, where the Darogah and Commissioner now reside ; but they contrived to have it removed to a better market place, under pretence of the former situation being unhealthy. In that respect, I believe, there is very little difference between the two places.

The Kazi of Kharakpur manages this remote territory. He has scarcely any duty to perform in ceremonials, as the faith has here made little or no progress.

Almost all the people are of the Sakti sect, three-quarters of those who have Gurus follow the Dasnami Sannyasis, and a quarter are guided by Brahmans.

The country is naturally very beautiful, as it consists of very rich lands, finely interspersed with detached rocky hills, that are covered with wood. Near Nuni these form a small cluster ; but in many directions it is intersected by level passages. The country, however, has been miserably neglected, and is overrun with forests, and the houses are very mean. The most usual fences, as in Bangka, are formed of dry branches and leaves, so as to conceal the huts altogether. The forests, as in the adjacent parts of Bangka, consist chiefly of Mowal about the villages, and of Sakuya and Asan in more remote parts. Many of these trees are stunted by extracting rosin or by feeding Tasar ; but in some parts the trees attain a tolerable size. There are only a few bamboos. The cultivated parts are finely planted, with mangoes chiefly, and a few palms.

There is no house of brick, nor any public building deserving notice. Kengduya is the only place that can be called a town, and may contain about 100 houses.

The division contains no remains of antiquity worth notice. The northern parts are in the Mogul province of

Behar, and the southern in that of Bengal; but the Mogul authority seems to have extended very little into these parts. Several tribes yet remain, who speak languages totally different from both Hindi and Bengalese; and the dialects of both these languages, that are in use, are most miserably corrupt, or rather unimproved. The southern parts are considered as belonging to Anggades.

#### SECTION 22D.

##### *Of the Territory belonging to the Mountaineers.*

There still remains to be described a large portion of the district, which is not included in any regular division established for the administration of justice, or preservation of order: because it is occupied by mountaineers, who are exempted from the ordinary course of law, and from all taxes. Causes, not affecting the public peace, they settle among themselves, by their own customs; but they are bribed by annual pensions to give up such as commit violent outrages, such as robbery and murder; and these are punished by the Judge, provided an assembly of their countrymen finds them guilty. An enormous establishment, said to amount to above 2500 men, is paid to check this handful of barbarians, and these are placed under a native officer, named Suzawul, who distributes the pensions, has charge of the whole corps of guards, seizes on all those who commit outrage, and carries on the intercourse between the magistrate and chiefs. The greater part of this establishment, as matters now are, seems to me totally superfluous, or rather injurious. These guards were, I believe, in former times employed by the Zemindars, and were the people who in fact committed most of the outrages that were attributed to the mountaineers; and at the time when Captain Browne made the settlement now existing, it may have been prudent to give this banditti a means of subsistence, in order to induce or enable them to lead an honest life; but now no people can have less inclination to give any disturbance than the mountaineers, as they obtain large sums of money from the Company, partly as pensions, and partly for services which they perform, and these, they know, they must immediately

forfeit should they resist the lawful exertions of Government in preserving the peace and security of society. In every country, no doubt, wicked individuals will occasionally commit outrage, and such must be expected among the mountaineers, as well as among other people; and it may therefore be necessary to have one or two native officers, men of respectability, who may make themselves acquainted with the manners of the mountaineers, who may apply to their chiefs to have all such offenders given up, and who may keep open the communication between the Magistrate and their chiefs. Far however from such a rabble as are now employed being of any use, I am persuaded that the duty of protection would be vastly better performed by a Havildar's guard of the mountaineers, which would defend the Suzawul's person, and secure the offenders with fully as much certainty as the 2500 rabble, for which the Company now allows lands. It can indeed only be from their intrigues and evil practices that any disturbance is likely to arise; and if suddenly turned loose, they probably would occasion some confusion that might require the action of a military force; but the whole establishment might safely be gradually reduced, as I shall have occasion to mention when I come to treat of the means by which this neglected territory may be brought into cultivation.

The territory of the mountaineers may be divided into a northern and southern portion: the former occupied by a tribe that has an appropriate language, that eats beef, and has not the least vestige of the doctrine of caste; the southern tribe has adopted the Hindi or Bengalese languages, according as these prevail in the lowlands adjacent to their hills; with this they have adopted the spiritual guidance of some low Hindus, and the doctrine of caste; and finally they have rejected the use of beef. Many other distinctions and subdivisions exist, which shall be afterwards mentioned; but these will suffice for a description of the territory, and are those which in a political view are the most important.

## SUBDIVISION 1.

*Of the territory of the Northern tribe of Mountaineers.*

This territory is by far the most extensive, and in general is best defined, because the abominable impurity of its manners has secured this tribe better from intrusion. Still however there is nowhere a proper determined boundary between the lands of this tribe, and those of the Zemindars, and these last are considered as corresponding in extent with the jurisdiction of the native officers of police and law. This is one of the circumstances most likely to occasion illwill between the Government and this tribe; as the Zemindars, although very neglectful of making a proper use of their lands, are exceedingly rapacious after its possession; and some of them will soon perhaps wish for a disturbance, in order that it may serve as a pretext for reducing their revenue, or for obtaining pensions. I would therefore recommend, that a boundary should be fixed, and ascertained by proper marks; and this ought to be done at the sole expense of the Zemindars, as it will be entirely for their real advantage. In fixing a boundary two difficulties occur. In the very middle of the division of Fayezullahgunj are scattered some hills, occupied by the mountaineers, who, although constantly traversing that territory, and daily dealing with its people, are exempted from the jurisdiction of its officers. If these could be induced to retire to hills that are unoccupied, of which there are many, I think it would be highly advantageous. In the next place, in the centre of the territory belonging to this tribe, there is a tract of fertile level land, lying on both sides of a fine river, and undoubtedly belonging to the Zemindar of Manihari, although he pays no rent, and has entirely deserted it, while the only lands that remain occupied have been purchased by the Company, and are given in part to some of the armed men, that are under the Suzawul. All these persons, and all those who cultivate their grounds, or whom the Zemindar might send to occupy grounds belonging to him, would be under the authority of the ordinary police, which is likely to produce a jarring of authority not easily conducted without dispute. I would therefore propose, that a

person entrusted with the care of the communication between government and this northern tribe, should reside at Majhuya, in this arable tract, and have the authority of Darogah, over its lowland inhabitants. It may contain 36 square miles of an exceeding rich soil, and, if protection were offered, might maintain a great many people, while traders residing in it would supply the wants of the mountaineers. From Fayezullahgunj to this tract, which is distinguished in the accompanying map by red, while the lands of the tribe are marked green, is a level route, that I travelled, and passes between the hills that are regularly delineated; while on all other sides it is surrounded by hills closely adjoining, which in general I have not been able to trace with precision. I presume, that this was the route by which the Marhatta army entered Bengal; although none of the people, whom I consulted, had ever heard of such an event: but in the time of Captain Browne (1772) it was still remembered. The road, however, is vastly worse than was represented by that gentleman, for although so far as Majhuya is tolerably level, yet it is exceedingly strong against cavalry, being narrow and covered with wood; and between Majhuya and Rajmahal hills of a considerable height intervene. The most common passage is by Chaundi, to the summit of which I found an exceeding fatiguing journey; and I have no doubt, from traces which I saw, that this was the way by which the Marhattas came, as by the side of the road were collected many heaps of stones, which the mountaineers said their fathers had thrown together by orders of any army, which came that way. They knew not indeed the nation of which the army was composed, a circumstance in which they were in no degree interested. So far as I could judge, from viewing the country from several hills, there probably might be found many passages through these mountains; but these are so broken by water courses, that few of them are fit for the plough, and the hills are more easy of access. I believe, however, that many parts are fit for the plough, but are carefully concealed by the mountaineers. Altogether without the hills, especially on the west side, there is a large extent of level land, which both the mountaineers and the

Zemindars claim, but which in fact is waste, and in the map, the boundary being nowhere fixed, I have been under the necessity of tracing one, by what I conjecture might be found reasonable; but I place little reliance on this, having been unable to demand proof for what was advanced.

This territory is on the whole exceedingly hilly, but the hills are neither high nor extensive. In general they may be two or three miles long and half a mile wide, and are very steep and rugged. Among them there are many springs and small streams, but in general the people are badly provided with water, as they live on the tops of the hills, and the springs are usually at the bottom. The villages are neater, and the huts better than those of the ordinary farmers on the plain. In many parts the views from them are exceedingly fine, although the woods almost everywhere are stunted. This on the hills arises from their being cut and burned after a growth of from six to eight years, in order for the fields to be cultivated. On the plains it arises from the trees being cut for firewood, which keeps low all towards the North and East, but on the West side there are some forests of a tolerable growth. There are but few bamboos.

This northern portion contains the following subdivisions —

1. The level land belonging to the Zemindar of Manihari contains, according to some, four Tappas, Majhuya, Pachkuliya, Diha, and Kangjiala, but according to others only two, the two latter being totally deserted. It is placed nearly in the middle of the whole breadth, but towards the north end.

2. Adjacent on both sides to the Zemindary lands of Majhuya, and called by that name, although quite independent of the Zemindar, are two hilly tracts belonging to the mountaineers. They are both under one Serdar and contain 5 Nayeps and 19 Majhis, who receive pensions from the Company, and 27 hills. It is said also that there are 7 Majhis who receive no allowance.

3. On one side of Tappa Majhuya towards the west is the greatest community of the mountaineers, called Tappa Mahihari, under 1 Serdar, 4 Nayeps and

61 Majhis, who receive pensions from the Company. It is reckoned to contain 66 hills, some of which have 2 villages, and some none.

4. Tappa Madhuban, North from the last, has 1 Serdar, 5 Nayebs, and 25 Majhis, who are pensioned, and is said to contain 31 hills. To this belong also several hills scattered through Fayezaullahgunj. Not one guard resides near it, yet the hill people are more civil than anywhere else, that I saw, and not a whit more turbulent.

5. Pergunah Garhi occupies the Northern end of the hills. One Serdar, 4 Nayebs and 29 Majhis receive pensions, and it is reckoned to contain 34 hills, one of which is detached, and surrounded by the division of Paingti. The whole face towards the river is very badly cultivated, and I should suspect that almost every family is pensioned.

6 and 7. The East side of the territory beginning at the N. end contains 2 Tappas, Yamuni and Chithaliya, both under 1 Serdar, who resided in the latter. There are in the 2 Tappas 6 Nayebs, and 78 Majhis, who receive pensions. In Yamuni are 41 hills, and in Chithaliya there are 55. They are very well cultivated.

8 and 9. In the corner, projecting over the lakes of Rajmahal is Tappa Kangjiyala, which extends on both sides of the Gumanmardan, and is divided into two Turufs. In the northern are 1 Serdar, 2 Nayebs, and 9 Majhis, who receive pensions, and I understand that 8 Majhis are not pensioned. The hills are very well cultivated, and are said to be 20 in number. In the other Turuf 1 Serdar, 2 Nayebs and 4 Majhis are pensioned, and 18 Majhis are said to have no pensions. There are said to be 26 hills.

10. South from Kangjiyala is a small territory called Mawas, because its inhabitants receive no pension. It contains 4 hills and must be distinguished from two other territories of the same name (Nos. 13 and 14).

11, 12, and 13. Pergunah Ambar is divided into 2 Turufs besides a small detached portion, the occupants of which receive no pension. The S. E Turuf of Ambar contains 1 Serdar, 1 Nayeb, and 21 Majhis who receive

pensions, but it is said to contain 48 hills, and that 23 of these are occupied. The other Turuf, towards the N. W. has 1 Serdar, 2 Nayeps, and 8 Majhis, who are pensioned. It is said to contain 26 hills, of which 11 only are occupied. In the small portion are 6 hills, 3 of which are cultivated, but none are pensioned, on which account it is called Mawas.

14. North from this, and in the centre of the hills is the other tract called Mawas, in which there are 1 Nayeb and 24 Majhis, and it contains 25 hills.

15. Between Mawas and the Zemindary lands is a long narrow territory called Tappa Payer, in which 1 Serdar, 1 Nayeb, and 31 Majhis receive pensions, and there are 32 hills. The Serdar resides in Tappa Chithaliya.

16. N. W. from thence, and bounding with Manihari, where I began, is Tappa Parsanda, in which 1 Serdar, 1 Nayeb, and 44 Majhis receive pensions, and it is said that there are 46 hills.

17. South from thence is Tappa Barkop, in which 1 Serdar, 1 Nayeb, and 34 Majhis receive pensions, and there are 36 hills.

18. South from thence is Dhamsaing, in which 1 Serdar, 1 Nayeb, and 22 Majhis are pensioned, and there are 24 hills.

19. South from thence is Yamuni Harnapar, where 1 Nayeb and 42 Majhis receive pensions, and there are 43 hills.

20. South from thence is Sumar-Pali, in which 1 Nayeb and 20 Majhis receive pensions, and there are said to be 21 hills.

The only antiquity in this division is Lakrugar, an old fort in the central arable land, where a Raja of the Nat tribe named Duriyar Singha resided, and governed the mountaineers, as well as the Nat, some of whom remain in the vicinity, and seem originally to have been of the same race with the mountaineers. He was driven out by the Kshetauris, who now possess the country, and who had a fort a Majhuya about two miles from the former. Here they resided for some generations, until the father of the present Zemindar, being inflamed with jealousy, excited the mountaineers to murder a Mogul

officer. After this the mountaineers, discovering the imbecility of Government, became too turbulent for the management of the Zemindar, who was compelled to retire to the low country.

There is no place of worship at all remarkable.

#### *SUBDIVISION 2d.*

##### *Lands occupied by the Southern tribe of Mountaineers.*

Although no land belonging to the Zemindars is surrounded by that belonging to this tribe, the boundaries are, if possible, worse ascertained, especially owing to the circumstance of those people having begun to cultivate with the plough, and having much good land fit for the purpose. They have induced farmers from the low country to settle among them, and to cultivate. All such persons are considered as under the authority of the common course of the law, and the Zamindars claim all the lands thus brought into cultivation. In order to prevent the confusion arising from such a clashing of ill-defined interests, I would here also recommend, that the person appointed to watch over this southern portion of the mountain tribes, and to correspond with their chiefs, should reside at Jagatpur on the Brahmani, near the centre of the territory, and near a well frequented and level road, that passes through its middle; and that the office of Darogah of police for all lowlanders settled within the territory should be entrusted to him alone. There are no guards along a great part of this frontier, which is bounded by the Virbhumi district; yet no sort of inconvenience has been found from the want, which in my opinion is a clear proof of that establishment being superfluous.

This is a much more fertile territory than that occupied by the Northern tribe, being much less mountainous; but it is less populous, as from fear of disturbance, it is the hills alone, that either tribe is willing to cultivate, knowing that on these the lowlanders will make no encroachment. Except in the South West corner the hills are low and detached, and roads frequented by carts or oxen pass through them in many directions. Owing to the vast demand for charcoal, on account of the iron

mines in Virbhumi, the woods are very much stunted. The villages of the hill people are much inferior in neatness and comfort, to those of the northern tribe.

The subdivisions of this territory are as follows. The tribe is divided into three portions, Kumarpali, Dangrpali and Marpali. The first is by far the greatest, and occupies both extremities of the territory, towards the south and north. The Northern portion is subdivided into four, and the southern into three portions. The Marpali occupy the west side of the middle parts and the Dangrpali the east side, neither being subdivided, so that in all there are nine divisions of territory.

1, 2, 3. The southern portion of the Kumarpali belongs to three persons of the same family and called Rajas. Of these there are two who receive no pensions. The third has a great territory, but almost the whole of what I have laid down for it is claimed by the Zemindar of Belpatta, although she [*sic*] has not cultivated one inch. The Raja lives at Dighi in its western extremity, and the hills (Kharipahar) which are in the books of the Suzawul or superintendent written as belonging to him, are at its West. One Serdar, 2 Nayeps and 4 Majhis are pensioned.

4, 5, 6. The northern portion of the Kumarpali, which in the Suzawul's books are considered as the only people entitled to that name, is occupied by 3 Sardars, 1 Nayeb, and 12 Majhis, who receive pensions, and their situation will be seen from the map. One of their territories, it must be observed, is split into two.

7. Adjacent to these is a small territory in Sarmi Tappa, which is occupied by 2 Majhis, that receive pensions.

8. The Marpali contains one large hill, and 1 Serdar, 1 Nayeb and 1 Majhi receive pensions.

9. The Dangrpali have a more extensive territory ; 1 Nayeb and 6 Majhis are pensioned.

In this part I heard of no traces of antiquity.

The only place of worship deserving notice is on Kamogorapahar. It is sacred to a female deity called Navapatrica, because she is worshipped by an offering of nine plants. On a certain day annually, in former good times, the Zemindar of Sultanabad, who seems

originally to have been of this tribe, was wont to assemble at this temple all the chiefs and other robbers, and to pray for success in their calling. Mr. Fombelle, when Magistrate here, prohibited the Zemindar from frequenting this pious assembly: and the lady, who now possesses Sultanabad, contents herself with sending an annual offering of 100. R. This and the remaining worship paid now to the goddess of the place, I am persuaded, proceeds more from a fear of her vengeance, should she be altogether neglected, than from a hope of her assistance in predatory expeditions, or an expectation that she should remove the terror of the fatal tree.

AN ACCOUNT OF THE DISTRICT  
OF  
**BHAGALPUR.**

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**BOOK II.**  
OF THE PEOPLE.  
CHAPTER 1ST.  
ON THE POPULATION.

In the Fusli year 1209 (A .D. 1802) Government it is said, ordered a Khanah-Shomari or list of inhabitants to be prepared. It was in two divisions only that I procured the result, and the nature of this satisfied me that I had nothing to regret in the want of the record.

In forming an estimate of the population I have not been able to rely much on any general statements procured from the natives, because I often found them unwilling, and not unfrequently unable to give me such information as I wanted. I have proceeded in the first place by estimating the number of people required to cultivate the extent of land occupied in every division, having taken into consideration the various natures of the soil and crops, the different quantities of stock, and the various degrees of industry among the people. I have then compared the proportions between the agricultural population and the other classes of society, as given by the natives; but with this I have seldom found occasion to be satisfied, and have endeavoured to correct the numbers in these classes from very minute inquiries made by the Pandit of the survey; because I

think his inquiries concerning the various castes occasioned less suspicion than those respecting the number of houses occupied by cultivators, artificers, and idlers, such being immediately and evidently connected with the value of each estate.

It must be observed, that the proportion of land cultivated twice in the year is here much smaller than towards the east, and that in many parts a very large proportion is sown either without a previous ploughing, or with very slight cultivation, while the stock of cattle is strong. On this account, notwithstanding an uncommon indolence and want of skill, one man in general cultivates more land than is done in Bengal. Had I indeed taken the reports of the farmers, I should have in some cases allowed 40 bighas for one plough ; but in such cases the ploughman does no other work, and people are hired to perform every other part of the labour.

In the 3rd Statistical Table will be found the results of my inquiries concerning the population of this district, together with an estimate respecting some of the causes by which it is affected.

A few (500) of the young men, chiefly from Mungger and the villages occupied by invalids, have entered into the regular corps of the army ; but this number is so inconsiderable as not to affect the population. A large proportion of the northern hill tribe belongs to a military corps ; but as this seldom, if ever, leaves the district, and as many of their women live with soldiers in cantonments, this does not in any considerable degree affect the population. In fact this tribe is much more flourishing than the southern, scarcely any of whom enter into service of any kind. Many of the people would wish to be considered as by birth qualified for the profession of arms, and on that account most of them excuse themselves from manual labour, at least of any severe nature, but some condescend to hold the plough, and all have farms either free or rented. They endeavour as much as possible to have these cultivated by servants, and prefer much to agriculture the casual employment of acting as daily messengers (Mohasel or Muzkuri). In general they are not well qualified for their profession by personal

endowments, and they cannot endure the restraints which European discipline requires. They fill up however the enormous police establishment which is here maintained, and, I believe, would be exceedingly willing to assist any party in a predatory warfare. The men serving in the regular police (Burukandaj) are superior both in knowledge and appearance to those commonly found in Bengal; but those paid in lands for military service are very indifferent. It was reckoned that in the whole district there were 9210 men dedicated by birth to the use of arms and willing to be employed in this kind of service. Of these only 4045 had found regular employment at home, 1580 had gone to other places in quest of employment, and 1110 strangers were here in addition employed. The military service, therefore, makes very little drain on population.

The civil service rather gives an increase of population. In the whole district it was estimated that 1107 men had gone to distant parts in quest of this employment, and that 1260 strangers had here found service.

Commerce makes little change on the population. A few Bangalese traders are settled in the wilder parts, but most of the commerce is carried on by natives. The number of boats is very small, and even these are mostly manned by people from the Puraniya district. In fact the people are of a very domestic turn, exceedingly unwilling to go abroad, and at home make very little exertion; but there is in this a good deal of difference. In the western parts near the Ganges, and in the eastern corner towards Murshedabad, the people are more industrious than they are about Rajmahal, Kahalgang, and through what is called the Janggaltari,

The drains on population are very small, and in general the manners of both women and men are exceedingly strict. The number of prostitutes is trifling, and in most parts the women are watched with an uncommon care and severity, while they are so slovenly as in great measure to lose all personal attractions. Notwithstanding these circumstances, and an uninterrupted peace for a number of years, with a large extent of very fertile territory unoccupied, it would appear from the reports of the natives, that the population is in some place on the

diminution, and scarcely anywhere is advancing with that rapidity which might be expected. For this diminution or slow progression of population various reasons are assigned, and deserve especial notice.

The system of premature marriages is carried to a very destructive length, and no doubt contributes to check population ; but not to a greater degree than in many parts, where the population has made a rapid increase. The widows, who adhere to the rigid rule of Hindu celibacy, are here more numerous than in Bengal. This however is probably not more than sufficient to counter-balance the superior strictness in the moral conduct of the wives of Bhagalpur.

The practice of inoculation is almost universal ; but the few families that reject it, will in all probability continue obstinately to adhere to their refusal ; for it has become a rule of caste. Some of them are Moslems of rank, who adhere to their folly from a knowledge of the doctrine which their prophet taught. The greater prevalence of inoculation in this district than in some of those already surveyed ought to have produced an increase of population ; but other diseases are no doubt common and it is to sickness that many attribute the decrease in the number of people. This I am persuaded is a mistake ; for in the first place, the diseases peculiar to India, especially the Koranda which chiefly affects propagation are not near so common as towards the east ; and fevers, the most common destroyer of mankind, are not near so common as in Puraniya. In the next place, the most populous part of the district, near Murshedabad, is just that where these two diseases are the most severe. It is true, that in Rajmahal, Paingti and Fayezullahgungj fevers are stated to be more common, but they are not near so fatal. The western parts of the district are, for a warm climate, uncommonly healthy, yet many parts there are very thinly inhabited.

Fevers in general are not so dangerous as in Europe, and it is only in the Eastern corner of the district that a great proportion assume a bad form. This indeed is said to have been only the case for about 17 or 18 years; for until then the vicinity of Murshedabad was by the natives considered as rather salubrious ; but now a sad

reverse has taken place, and almost every year there is in that part of the country a severe autumnal epidemic. Everywhere in the vicinity of the hills and woods the vernal epidemic is more severe than in cultivated plains; but I nowhere heard that it equalled in severity the epidemic of autumn.

Fluxes, pituitous and bilious (Aong and shekumjari) are more common in spring than autumn; but are neither very frequent nor destructive. Choleras are far from common.

The people afflicted with both kinds of leprosy are viewed here with the same injustice that follows them in Puraniya. The most terrible in the Hindi dialect is most commonly called Kor but is not near so common as towards the S. E. That in which the skin becomes white, on the contrary, is more frequent, and is most commonly called Charka. In general it is only partial, but I saw several instances of complete albinos, with weak blue eyes, and white hair. Two of them were children born of parents quite black and apparently in good health; but the children were weakly.

At Tarapur in this district I saw two dwarfs, both adult men: one of them was 3 feet 9 $\frac{1}{2}$  inches high, and tolerably well made; the other was somewhat smaller, but he was rather distorted.

The different chronic swellings are here much rarer than in the districts hitherto surveyed. Persons who reside on the right bank of the Ganges seem little subject to the swelling which affects the throat, and most of those in the divisions south from the great river who have this disease have been affected during a residence, of considerable length on the opposite bank. The people who live on the bank of the Man river are considered as peculiarly liable to this disease. It is said that Haradatta Singha, a neighbouring Zemindar, dug there a fine well (Indara,) which was lined with brick. While this well continued in repair the disease is said to have appeared in the vicinity less frequently; but since the water has become bad, the disorder has become as common as ever. These circumstances would seem to point out a certain condition of the water used as the cause of the disease; and it may be supposed, that the water of the Ganges is

purified by a long course, from the quality that produces this disease, and which seems to be peculiar to the water of Alpine regions. I am however told that the people of the Northern hill tribe are subject to this complaint, and their hills have nothing approaching to an Alpine elevation.

On passing the boundary of the Mogul province of Bengal the Sarcocele becomes a more rare disease ; and seems to diminish more and more towards the west.

In this district the fever, accompanied by an enlargement in the glands of the neck, is very rare ; but that attributed to a diseased state of the nose is now exceedingly common and troublesome ; for it usually attacks those who are liable to it almost every month, and lasts two or three days at a time. Formerly, as it is said, this disease was not common, and it is for only five or six years that it has become so prevalent.

The people of this district, and those of the hill tribes more particularly, are much subject to rheumatism, which seems to be owing to a want of sufficient clothing and to their supplying the want in cold weather by hanging much over a fire.

To return to a consideration of the causes of the want of people, in some parts of the district, as from Rajmahal to Kahalgang, it is by many attributed to the frequent marching of troops and to the passage of travellers, especially Europeans, and it is alleged that both have so shamefully plundered the country that it has been deserted. Although instances of plunder by troops and by the servants of Europeans travelling through the country have undoubtedly occurred, yet I am persuaded that both parties have in general taken very great precautions to avoid injury, and that the complaints, which the natives of these parts are in the habit of making, are not only in general false but are done for the purpose of enhancing the price of everything that they sell, and for the purpose of supporting a base system of mendicity into which they have fallen. They find, that these complaints of injustice induce travellers, from a laudable desire of supporting the natural character, to overlook imposition, and to open their purses. From the attention to military discipline, and from the honourable disposition, which I am persuaded

most European officers and travellers in this country possess, I am not only convinced that most of these complaints are groundless : but farther, that such degradations are not the cause of the country wanting people, I conclude with confidence from the very best inhabited parts of the districts being on the sides of roads which are just as much frequented by troops and by European travellers, as those in which the complaints prevail.

The real causes in my humble opinion, that have principally checked the progress of population are as follows.

First the people in the more civilized parts are most miserably attached to their native spot, and destitute of adventure. Mungger and Suryagarha are now overstocked with inhabitants yet the people cannot be induced to settle on the west of Mallepur, that are quite adjacent and enjoy a very good climate. One of the most urgent reasons that such people mention for their unwillingness, is the want of barbers and washermen in remote places ; for in this district almost everything is attributed to some cause that is absurd. Washermen in fact could be of no use as very few of the people's clothes pass through their hands ; and barbers are not here so haughty as in Bengal, and both they and washermen would no doubt follow the multitude.

Secondly, in the wilder parts the people are most miserably indolent. This has been partly owing to the profusion of government in bestowing pensions and lands on idlers, and to the success which shameless beggars have had in fleecing passengers on a road that is much frequented ; but it must be chiefly attributed to habits of former times, when a predatory anarchy existed throughout almost the whole country. Although this has been almost entirely checked, yet the habits of idleness, which always accompany such a state, have not yet been overcome, and the means taken to allay the ferment by keeping up a vast establishment of men paid in land to support the police, have tended to support the spirit of indolence. In my account of the hill tribes I have mentioned the number of them that receive a monthly bribe to induce them to be quiet, and I have also mentioned that above 2500 men under Ghatwals receive lands to watch

their conduct ; but this is not all the men of the district that are employed under the police officers called Ghatwals. In the wild parts every Zemindar formerly assigned lands to men of that name, who held them by military tenure, and assisted him to carry on the depredations which then they all committed. On the establishment of order these Ghatwals and men were continued in their lands, and bound to assist in keeping the peace, and according to the original view of the settlement made by Captain Browne, were intended to act as a force for the protection of the frontier against irregular cavalry. Both these purposes being no longer of use, the sooner this sort of tenure is abolished the better, as the men employed still keep up a spirit of contempt for labour ; and wherever they are numerous, this spirit extends to all classes. But to this subject I shall have occasion to return, when I come to treat of the tenures of land.

The third and great cause of the low population of this district is the bad management of the landlords, who are in general not only unwilling to take the least trouble or to incur the smallest expense in improvement, but act towards their tenants in a most unjust and capricious manner, and the constitution of our courts of law has not yet held out means adequate to remedy so great an evil. I shall afterwards however have occasion to recur to a fuller examination of this conduct.

## CHAPTER 2ND.

### ON THE CONDITION AND MANNER OF LIVING OF THE PEOPLE.

In my account of these I shall chiefly confine my remarks to the manners of the people inhabiting the more civilized parts on the banks of the Ganges, and who speak the Hindi language. When I treat of the ruder tribes of the interior, I shall mention the circumstances that are most remarkably different.

As in Puraniya I shall chiefly confine myself to some general observations on the different heads of expense.

I directed a native assistant in every division to make an estimate of the proportion of families classed according to the number of persons, which each contained, with the average expense of each class; but after some time I perceived that less reliance could be placed on the results, than in Puraniya I had expected might have been the case. The people consulted indeed almost uniformly increased the ratio of expense in proportion to the number of people in each family, but, although this may answer in some ranks of society, it will not do among the lowest, where poor labourers have often as many children as farmers in easy circumstances. I afterwards desired my assistant to enter more into particulars, and to divide the families into classes of each number, and then to divide each class by the different rates of their usual expenditure. The results of his inquiries will be found in Tables Nos. 4 & 5, upon the accuracy of which, however, I place little reliance.

It must be here also observed, that the expense of the lower classes seem to be greatly over-rated, for on the

most careful examination I have not been able to learn how such incomes can be procured; and the exaggeration seems here vastly greater than in Puraniya, as the people there undoubtedly live better, while the rates of expenditure are here higher. The expense of the higher classes again are here also diminished, although perhaps not more so than in Puraniya.

The people of rank here are still more fond than in Purainya of going out with a numerous attendance, especially of armed men; but in every other respect their appearance is very mean and squalid, and their marriage ceremonies are so enormously expensive, as to render the utmost parsimony on other occasions absolutely necessary. Funerals are conducted on more rational principles, but still are exceedingly burthensome. The practice of hoarding bullion is supposed to be very general, especially among the middle ranks, whose external appearance is in general very mean. This however is only a common belief, and its truth may I think be very much doubted. At any rate such hoards are totally lost to society, and could only be of use to an enemy of society, who would hesitate at no means for extortion. In all estimates of the wealth and prosperity of a country such resources should be entirely laid aside.

In the topography of the divisions I have given an account of the buildings of the natives, so far as they affect the appearance of the country; and here as well as in Puraniya I might have added the Indigo factories, which are the best looking places in the country. In this district their numbers are so inconsiderable as to produce little effect, and are confined almost entirely to the banks of the Ganges.

In the three considerable towns of the district, the former residence of Moslem chiefs seems to have introduced the custom of building houses of brick, which as will appear from the 6th Statistical Table, are pretty numerous. They are in general occupied by traders, and no Zemindar has a house becoming the rank of a gentleman. The best are in the parts belonging to Bengal. The brick houses of the towns are in the very worst style, and the meanest that I have seen anywhere

except in Maldeh. Some of them have tiled roofs, but in general they are covered with plastered terraces. All have wooden doors, and if there is any window, it is carefully closed with wooden shutters, but such means of gratifying wanton curiosity are not common.

The houses that are not built of brick, but are covered with tiles, have in general mud walls, and are very wellsuited for this country, so that it is unfortunate that their number should be so small. If whitewashed, or painted with reddle, they might be neat, and comfortable enough.

The natives in some parts of this district have taken advantage of the abundance of clay with which nature has furnished them, and have built many of their houses with this material, which is of a very good quality. In other parts again, even where clay is abundant, it has been entirely neglected, as too troublesome and expensive.

The clay houses are of two kinds, one having two stories, and the other only one. The former usually consist of one chamber on each floor, and most commonly it has in front of the lower story an open gallery supported by small wooden posts. The stair is extremely wretched, and indeed the most common means of mounting to the upper room is by means of a ladder. The most usual dimensions are from nine to fifteen cubits long, by from seven to ten cubits wide. In the upper room a person cannot always stand erect ; the lower is generally six or seven cubits high. There are always wooden doors. The roof is thatched with a frame of wood and bamboos. The walls are not whitewashed, nor in Behar, especially, are they well smoothed. The floor is terraced with clay. A house of this kind costs from 20 to 25 R. and will last 15 years ; but it requires annual repairs. If the roof is burned, the walls are not materially injured, and much of the property in the lower apartment may be saved.

The houses with mud walls and consisting of one storey, are thatched, and have no ceiling covered with clay to lessen the danger from fire. These houses consist of one apartment, of the same size with those of two stories, and have seldom any gallery. The roof is

in general of the same shape with that in the eastern parts of Bengal, consisting of two sides meeting in an arched ridge ; but the pitch is usually very low, and they are commonly of the structure called Chauka, of which I have given an account in treating of Puraniya. In Kalikapur most of the roofs consist of four triangular sides, forming a kind of pyramid ; or, if the house is oblong, the two lateral triangles are truncated. Such a roof is called Chauri. In that part of the country the houses are vastly neater and cleaner than in Behar. The thatch in some parts is made of various kinds of grass, all inferior to the Ulu of Bengal ; in others it is made of rice straw, a miserable economy.

I saw no houses, the walls of which were made of mats of bamboos ; but among the woods, many have walls of bamboos split and interwoven like a basket, for wild bamboos are there exceedingly common and cheap ; but such huts are by no means larger, better or more comfortable than those which have walls made of reeds, confined by bamboos or sticks. In many divisions both kinds are generally plastered with clay, and are so covered, on one side at least, as to prevent peepholes. The front also is usually covered on both sides, and in Lakardewani many are painted with reddle, which gives them a neat appearance. The framework is most com monly after the Arhaiya fashion, which in the account of Puraniya I have already explained ; but many have a frame called Maghaiya, which is the proper name of Magadha, and of which a plan will be seen in Drawing No. 22. This is still a more wretched roof than the Arhaiya.

The vast abundance of wood and bamboos in the interior nearly about compensates for the indolence and consequent poverty of its inhabitants, so that the huts there are nearly in about the same state of wretchedness as in the more cultivated parts. The huts of this kind are from 9 to 15 cubits long, and from 6 to 10 wide, and cost in towns from 6 to 10 R. but in the woods they are almost always made by the hands of the occupant or of his servants, so that the price cannot be ascertained. The plastering with clay may make a difference of from 8 to 12 anas.

The hovels in form of a beehive are not so common as in Puraniya. They are most usual on the north side of the river, where bamboos are very scarce, and in Fayezillaqunj, where the people are totally abandoned to sloth. The people on the inundated lands usually take some trouble to raise the floor, and it is only for two or three days at a time, in the height of the floods, that the water covers their floor.

If there is any native house in the district sufficiently large to accommodate a wealthy family, the number must be exceedingly small; and the usual abode the wealthy consists of a number of buildings, each of one apartment, or perhaps one of the number may contain two rooms. Wherever the owner can afford it, the whole is hid by walls or fences, which are generally very unseemly. The best are mud walls thatched to prevent the rain from washing them away. Bamboos, which in many parts are very cheap, make a neat fence, but it admits of too much peeping. Dry branches, with the withered leaves adhering, are preferred in the woods, and reeds confined by bamboo splits are chosen in the open country. The huts in the latter are usually built close together, and seldom separated by quickset hedges or gardens, or sheltered by gourds, climbing beans, or other plants, so that they appear naked, and fires are exceedingly destructive. The spaces between the huts are in general as slovenly as in Puraniya.

The people here have scarcely any furniture, except bedding, and some brass, copper, and bellmetal vessels.

Bedsteads are much more common than in Puraniya. The best are called Palang or Chhaparkhat, and their wooden work is somewhat polished, while they have curtains, mattresses, pillows, and a sheet, and the people who sleep on them cover themselves with sheets or quilts, according to the weather. The next kind, called Charpayi, is very rough, but the feet are turned, and the bottom is made of ropes, wrought pretty close together. These have no curtains, and it is a few only that have a very bad mattress. The ropes are usually covered with a blanket, a small cotton carpet, or a quilt. The worst kind of bedsteads called Khatiyas, are made entirely of rough sticks rudely joined together, and the

bottom is made of straw or grass ropes. A coarse quilt serves for bedding.

A few during the floods sleep on bamboo stages. Many sleep on the ground, chiefly on mats made of grass (Kusa) or of palm leaves.

In the 7th Statistical Table will be found an estimate of the manner by which the people are covered by night and by day. In the parts of this district that belonged to Behar, the fashions of dress are nearly the same as in Puraniya. The higher rank of Hindus, even Pandits, have on occasions of great ceremony adopted, in a great measure, the Muhammedan dress. Many of the Brahmans, as in the south of India, wear a cap of cotton cloth dyed, which sits close to the head, and descends with two flaps over the ears. It is a very ugly thing, but seems to be the original dress of the sacred order.

In general it may be observed, that the people here, especially the women, are, if possible, more dirty than those even of Puraniya, and that their clothing is more scanty. The poorer women are allowed only one piece of cloth in the year, and it is not woven of a breadth sufficient to hide their nakedness, so that two breadths must be stitched together to make one wrapper, which, after all, is very scanty, and is called a Kiluya, while that of proper dimensions, woven of full breadth, is called a Sari. In the estimate, what is called silk, consists often of the Maldehi cloth, made of silk and cotton mixed. Some cloth of Tasar silk is made use of by women of rather a low rank; but very little of the Bhagalpuri cloth, made of silk and cotton, is used in this district.

All men that can afford it use leather shoes, and it is considered so essentially necessary to enable them to work that ploughmen are usually provided with this article at the expense of their master. The Hindus of rank, who cannot pray or dress their food with their feet in leather, use on such occasions wooden sandals. Muhammedan women also use shoes, but the Hindus of rank would be as much disgusted by seeing one of their women shod as a true Englishman is by seeing a barefooted lass. Low women and even some of pure birth but laborious professions, such as milkmaids, save

their soles by leatheren sandals, but no Hindu woman, except some trulls from the camp, would here consent to hide the beauties of her feet and ankles, which in fact are very neat.

Ornaments of the precious metals are not so common as even in Puraniya. The Hindu women usually ornament their arms with rings of coloured lac, and paint their foreheads with red lead. The women of the milkmen, however, and some other castes of labouring people, use rings of bellmetel or brass, either for one or both arms. The Muhammedan women also use chiefly rings of coloured lac, of a shape different from those used by the Hindus ; but many of them use rings made of glass, such as are worn in the south of India. Both religions give ornaments of tin to their children.

The custom of anointing the body with oil in the western parts of the district is not very prevalent ; but ploughmen, as almost every where in Bengal, during the rainy season, never work without rubbing their feet.

In the parts of the district towards Murshedebad, the people, especially the women, are more cleanly ; they almost all anoint themselves frequently, and the women use much gold, silver and shells as ornaments, nor do they daub their faces with red lead, except a small mark at the upper part of the nose. They also make only a few marks of the kind, that in the South Sea Islands is called Tatooin ; but the women of Behar are almost as fond of this ornmament as those of Otaheite, especially on the parts that here are most commonly visible. Some new fangled people, however, especially among the women of the Brahmans, begin to think that the black marks disfigure their skins, and these make no more stains than just enough to satisfy the conscience of those who would not drink water from the hand of a nymph whose skin was spotless.

Women and children blacken their eyes with lampblack and oil put under the lids. Men only use this mark of effeminacy at their marriage. The women tie their hair as in Puraniya.

Although the clothes of the people are very dirty, I do not think that they are so much affected with

cutaneous disorders as towards the East, or as in the South of Bengal.

In the eighth Statistical Table is contained the result of my inquiries respecting the diet of the natives. At Bhagaipur, Mungger, and Rajmahal, meat is every day to be had in the market : but it is so wretchedly lean that it is unfit for the use of an European, farther than that soup may be made of it. The meat commonly sold in these markets is mostly goat, but beef is occasionally procurable. At Mungger, on account of the Europeans, a good many sheep are killed. In the other places very few, as the natives prefer goat flesh. A few young buffaloes, chiefly males, are brought to market. The Hindus of this country, except the very highest castes, would purchase meat from the butcher, could they afford it ; but by far the greater part of the meat used in the district, is that offered by the Hindus or Muhammedans to their gods or saints. None of the sect of Vishnu ought to eat meat ; but here many of them defer taking Upades until they arrive at a good age, and until they indulge their appetites ; and on occasions of festivity do not prevent their wives and children from indulging theirs. There are, however, many that reject meat, and in the Table these are included among those who cannot afford it. The helplessness of the people prevents them from procuring near so much game as they might easily have; still, however, this forms a very considerable portion of the meat that is used. The impure tribes in the greater part of the district are not so well provided with pork as in Puraniya.

In some parts of the district fish is seldom procurable; and in most parts there is a considerable proportion of the inhabitants that reject its use. In most parts, near the Ganges, fish is not procurable during the inundation, and it is only in Rajmahal and the divisions south from thence that there is a regular abundance, or that the people are disposed to avail themselves of this kind of food, so much as is usual in Bengal. This of course greatly diminishes the nutrition which they receive, although they use more meat than is common in Bengal.

Milk, however, is a more common article of food than in most parts of India ; but it is almost entirely used after

it has become acid and has curdled, which very much diminishes its nutritive qualities.

In Bengal every kind of curry, whether made of meat, fish, pulse, or fresh vegetables, is called Byangjar; but in the Hindi dialect, which seems vastly inferior to the Bengalese in copiousness, they have no common word for this part of food or seasoning, although it is here in almost universal use. Twice a day almost everyone prepares his grain, either by boiling it or by grinding it to flour without parching, and making it into cakes (Roti) or by parching it, grinding it, and then forming it into a paste which is not baked (Chhattu). The first is always eaten with some kind of curry, the two latter by all those who can afford it are eaten either with curry or with curdled milk, but perhaps one-eighth of the poorest people in the Behar part of the district, for eight or ten days in the month, must content themselves with a little salt to their cake or paste. Their common curry consists of a little pulse or fresh vegetables fried with a very little execrable oil, salt, capsicum and turmeric. Many of the Moslems and low Hindus add onions and garlic, but the higher castes of Hindus, however poor, abhor this savoury addition, though admirably fitted to diminish the insipidity of their food.

The portion of oil and salt, which the poor are able to procure, is vastly too small. The rich have it in greater abundance, and the wealthy have from two to four curries at each meal. Those in middling ranks have this luxury five or six times a month; and the poorest at their marriage feasts or such high occasions. By consulting the Table, the proportions of these different classes may be seen. Oil and salt, capsicum, and turmeric, are the grand articles of seasoning; acids are little employed. The quantity of foreign spiceries, chiefly black pepper, is very small, and the number of those who use them may be seen in the Table.

Ghiu also, or melted butter, is a luxury, the daily use of which falls to a very small proportion of the community.

With respect to the oil, the quantity considered as a full allowance for five people, young and old, varied in different places from 11 to 50 s. w., the latter in the

capital, where much business is done by the lamp. The average is about  $20\frac{1}{2}$  s. w. The second class consumes from 5 to  $17\frac{1}{4}$  s. w., average  $10\frac{3}{4}$  s. w. The third class uses from  $2\frac{1}{2}$  to  $11\frac{1}{2}$  s. w. average  $5\frac{1}{2}$  s. w. The lowest class procures from  $1\frac{1}{2}$  to 5 s. w. average 3 s. w. As usual, this allowance contains the whole consumption for lamp, unction and kitchen, and no one can ascertain the proportion ; but the higher classes using a much larger proportion for the two former purposes than the poorer, there is less difference in the quantity used as seasoning than would appear in the above estimate.

The whole of the salt being used for seasoning, the difference in the proportions used by different classes is much greater ; but as the rich use three or four dishes, while the poor use only one, their dishes are not higher salted ; but their food is much better seasoned, as they have four dishes in place of one, to correct the insipidity of the grain, which forms the basis of their food. The people here never use ashes to supply the place of salt. Very little of the salt from the coast of Coromandel is here in demand. The quantity said to be abundant for the daily consumption of five persons, young and old, varied in different divisions from 7 to 23 s. w.; but the average was rather more than  $12\frac{1}{4}$  s. w. and the people were commonly divided into four classes as with respect to oil, diminishing in various proportions ; so that the second class varied from 4 to  $17\frac{1}{4}$  s. w., average 8 s. w.; the third class varied from 2 to 12 s. w., average  $4\frac{1}{2}$  s. w. The lowest class varied from 1 to  $5\frac{1}{2}$  s. w., average 3 s.w.

Rice forms the staple article of food with all that can afford it ; but the rich sometimes, for the sake of variety, eat wheaten cakes. The poorer ranks must for a great part of the year content themselves with wheat, or still coarser grains. Some of these grains they boil in imitation of rice ; but in general they are made into cakes or paste as I have before mentioned, and the paste is often made of different kinds of pulse ; but this is not included in the Table, where the pulse, stated to be used, is entirely dressed as a curry, and eaten as a seasoning with grain prepared by boiling or as bread or paste. In the wilder parts of the district, some of the poor, for

some months in the year, cannot procure grain, and use in its stead the dried flowers of the Mahuya tree (*Bassia latifolia*), the seeds of the Sakuya (*Shorea robusta*), and some other natural productions, that will be mentioned under that head. This I look upon as a most decided mark of the most extreme indolence and want of skill in agriculture, as these people are surrounded by fertile lands totally waste, and which they might procure on the most moderate terms.

The quantity of cleaned grain stated to be sufficient for the daily consumption of five people, young and old, varied from 72 to 40 s. w., and the average is  $52\frac{1}{2}$  s. w. a trifle less than the average of Puraniya.

In the ninth Statistical Table will be found an estimate of the extent to which the use of various stimulating or narcotic substances is carried. In the account of districts formerly surveyed, I have already said most of what occurs to me on this head, and shall only explain some differences that respect this district, and some errors into which I have previously fallen.

It must be especially remarked, that Mungger is the place of the whole district in which almost every one of these substances is used in the greatest quantity; yet the people there are on the whole the most industrious, skilful and healthy in the district, and the country is the most fully occupied.

In some of the divisions, especially Lokmanpur, Pratapgunj, and Furrokhabad, the proportion of those who drink distilled spirits is evidently underrated, and the same has been done respecting those who drink palm wine in Lokmanpur, Kumurgunj, and Tarapur, in the two latter of which, in particular, the practice is almost universal.

Everywhere west from Udhawanala, throughout the cultivated country, the palms have become so plentiful as to be a fit object for taxation, but as yet the licences have been very little productive. This may in a great measure be attributed to the manner in which they are let. Each year, previous to the commencement of the season, those who wish for licences repair to Bhagalpur, where they make a specific bargain with the Collector, who can have no knowledge of the local

circumstances, by which alone the value of the situations can be ascertained. Further, it is naturally to be supposed that the various persons who wish for licences, meeting at one place, and using all indirect means of influencing the sources of information which the Collector must use, generally succeed in reducing the tax to a trifle.

There is another circumstance which seems also to affect the revenue from Palm wine. The Zemindars and other owners of the palms, finding that one man has leased the right of retailing and is able to give Government a duty, are desirous of sharing the profit ; and as they have the man entirely at their mercy, they heighten the rent of the trees, and will continue to do so until no one can afford to give any tax to Government. The only remedy for this, and which I have no doubt would be found to render the tax much more productive, would be to lay a tax on the palms by number. I shall have occasion to state the propriety of doing the same on Mango trees, and the whole district being divided into proper divisions, the tax on trees in each should be annually farmed to the best bidder. I shall have occasion to mention this more fully when I treat of the palms.

In almost every part of the district the only spirit used is distilled from Mahuya flowers, and a full account will be given of the process in treating of the manufacture. The spirits drawn by native artists both from grain and from this flower, have a smell so disgusting, that I have not been able to taste them so as to judge which is the least execrable; but I have had already occasion to dwell on the advantage that might arise from an improvement of the manufacture. The most execrable quality that can be imagined is no bar to excess ; on the contrary it rather conduces to it. This is strongly confirmed by what I have seen here. In no country have I seen so many drunken people walking abroad ; and in more than one instance I saw men, who from their dress were far above the vulgar, lying on the road perfectly stupified with drink, and that in midst of day, and in places far removed from the luxury and dissipation of towns.

I have not ventured to make any enquiry after the number of women who drink, lest I should give offence,

I believe, however, that it is not considerable, and that such a practice is confined to some very low castes.

In the accounts of the former districts I have supposed that betel was a substance free from an intoxicating quality, having never myself used it, and having heard the practice extolled by some of our moralists, who often exalt Indian sobriety as a satire upon European excess. I have since had occasion to observe that the learned and accurate Kampfer considered the betelnut as a strong narcotic and on questioning the natives I find that this is actually the case. They say that different kinds of nut possess very various degrees of this quality, but that all, like other narcotics, produce an exhilaration and insensibility which accounts for the fondness with which this nut is devoured by nations that are restrained from using strong liquors. All betel that is not dried, possesses this quality the strongest, and the immense quantity of such used in Dinajpur must abate considerably the praise of sobriety that I have given to its inhabitants. The people here using much strong drink are less addicted to betel ; for, although a large proportion is said to procure betel in abundance, the quantity called such here, would towards the east be considered as trifling, few using it more than two or three times a day. At the capital eight leaves and two nuts are reckoned a full allowance for the most wealthy.

Fuel in almost every part of the district is abundant, as there is no place far removed either from forests, or from sandy banks overgrown with tamarisks. In fact charcoal and firewood form a considerable part of the exports of the district ; yet in almost every part cow-dung, mixed with the husks of rice and other grain, forms some part of the fuel, because it is collected close to the house, and costs less trouble to bring home than wood, which may be two or three hundred yards off. Wherever the country is tolerably clear, the poor burn scarcely anything else, except towards Murshedabad, where they are still worse economists, and burn much straw. In the cold season almost every family burns a fire all night, and sleeps round it. In the 10th Statistical Table will be found an estimate of the proportions of different kinds of fuel used.

In the same Table will be found an estimate of the kinds of oil used for the lamp, and of the various degree in which the inhabitants of different ranks and places enjoy this convenience. The consumption of lamp oil in religious ceremonies is much smaller, even in proportion to the number of inhabitants, than towards the East.

The natives of this district are very fond of a numerous attendance and showy equipage; but their poverty prevents them from vying in this point with those of Puraniya, and the only persons that make any show are the Nawab Mudarukud Doulah and the Rajas of Kharakpur and Gidhaur. An estimate of the manner in which the people here are provided in this article of luxury will be seen in the 11th Statistical Table.

Four of the fourteen elephants, it must be observed, belong to Dular Chaudhuri of Puraniya, and are not kept for show, but are employed to destroy the wild animals of this kind with which his estate was infested.

Camels just begin to appear in the western extremity of this district, and the Raja of Gidhaur keeps two for carrying his baggage.

The people here are less addicted to horsemanship than in Puraniya, and the greater part of the ponies mentioned in the list are used as beasts of burthen. They are, if possible, more wretched than those of the districts hitherto surveyed. Twelve natives have one-horse chaises with two wheels, two somewhat in the fashion of what in Bengal is called a buggy, the others (Ekka) after the manner of Hindustan.

Five carriages after the fashion of Hindustan with four wheels (Rath) are drawn by oxen. The inhabitants here however use many two-wheel carriages drawn by oxen (Raharu and Majholi) and many Brahmans have the sense to use this conveyance. Pandits however reject the abomination. A great majority of them are employed for the conveyance of goods, as well as for travelling, each carriage being provided with two bodies adapted for the two purposes to which it may be applied. Very few of the carriages are of the same structure with that used in Puraniya but the wheels are fastened to one axletree as common in Europe. In Puraniya I was led

to think that the great load taken by the carts there was chiefly owing to their structure, but the load taken here seems to be nearly the same, and there is little difference in the strength of the cattle.

Palanquin bearers in this district are very numerous, and are chiefly employed at marriage ceremonies, which here is the grand occasion for show and expense. In general they are totally unwilling to leave their own home, but near the great road are many who live by conveying those who travel post. Those have very high wages, but in the interior the wages are low. The planquins are exceedingly rude, and their number small, for the bearers very often keep one for each set, and this is let out to whoever employs them, and at marriages by far the greater part of the bridegrooms are carried in a kind of litter called Chandol [?Chaudol], which is made for the purpose of a few rough sticks and bamboos. The planquines are of the various fashions mentioned in my account of Puraniya.

The free male domestic servants of the great are of three kinds : Bhandaris who are stewards, and take care of all the household effects ; Khedmutgars, who dress their master, attend him at meals, supply him with tobacco and betel, and make his bed ; and Tahaliyas, who clean the kitchen and its utensils, bring wood and water and buy provisions ; but in common one man does everything, and take care also of the horse, and of any cows and goats that may live in the house. Their wages vary from 8 to 24 annas a month, besides food and clothing. About 1 r. is however the average ; the food may be as much and the clothing may be 4rs. a year. The whole allowance seldom exceeds 30rs. a year.

Female free servants are in general not procurable, and those that can be had are commonly old woman who have lost all their kindred, and attend as domestics for food and raiment. They are called Chakranis, Dasis and Kamiyas. In some divisions poor women, who live at home, earn their living by bringing water for the rich, who have wives of whom they are suspicious, and who thus take away all excuse for going abroad. Women of this kind are called Panibharin, and they usually engage to supply a family with so many pots of water a day, at

1 Paysa (1/64 R.) a month for each pot. A woman can in this manner earn eight anas a month, besides spinning and managing her family concerns, including the supply of fuel.

The invalids have in general servants, male and female, whom during their service they either purchased, or acquired by the force of arms. Although such might be called slaves, this word would convey a very different idea concerning these persons, from what is the real case. In fact these boys and girls are looked upon by the old soldier as his children ; and when he dies, he in general leaves them the whole of his effects. If the girl acquires a proper age, before the veteran's death, she often becomes his concubine ; and many of them as wives, receive a pension from the Company.

Proper slaves of the male sex are in this district called Nufur, and their women are called Laundis. They are confined to the part of the district included in Subah Behar. In general they belong to the owners of land, chiefly on free estates, or to wealthy Brahmans, who rent land. None of them are employed as confidential servants, such as in Puraniya receive a good farm for the subsistence of their family ; on the contrary they are generally very poorly provided, and the greater part of the men are employed in agriculture. Some of them, when there is nothing to do on the farm, attend their master as domestics ; others are employed entirely as domestics, and living in their master's house receive food and raiment ; finally, others are constantly employed in the field, and these get no allowance, when there is no work on the farm, but are allowed to cut fire-wood, or do any other kind of labour for subsistence. When old, their allowance is in general exceedingly scanty, and commonly depends in some measure, and sometimes in a great part, upon what their children can spare. If they have no children they are sometimes turned out to beg. The usual daily allowance is about 3 Sers Calcutta weight, or about 6 lb. of rough rice, or of the coarser grains, the great quantity of the husks of the former making it of less value than the latter. The slave from this must find clothing, salt, oil, and other seasoning, fuel, and cooking utensils. His master gives him a

wretched hut, where he lives almost alone ; for although he is always married, his wife and children live in the master's house, and there receive food and clothing. The women when young, are usually alleged to gratify their masters' desires ; and, when grown up, sweep the house, bring fuel and water, wash, beat and winnow grain, and in fact are women of all work. At night they go to their husbands' hut, unless when young and too attractive ; in which case they are only allowed to make him occasional visits for the sake of decency. The boys, so soon as fit, are employed to tend cattle, are early married, if possible to a girl belonging to the same master ; but sometimes the master has no girl of an age fit for marriage, and cannot purchase, in which case he allows his boy to marry a girl belonging to another master, or a free girl, in either of which cases he gets no share of the children. If a man has a marriagable girl, and no slave to whom he can give her, he allows her to marry another person's slave, or even a free man ; but in both cases retains all the children. In general a free man marrying a slave girl is not personally degraded to slavery as in Puraniya ; in other places he becomes a Chutiya-Gulam (cunno servus), but cannot be sold ; he works for his wife's master at the usual allowance that a slave receives. Slaves may be sold in whatever manner the master pleases ; but they are not often brought to market.

The abominable practice of slavery seems to be a fair object of taxation, and the owners are in general the persons who of all others, in every point of view, are most able to bear additional burthens. They are mostly drones, who either pay no land tax or who rent land, which on account of their supposed sanctity they get for almost nothing. Six rupees a head for every able bodied slave might annually be very well afforded, and easily collected by rendering a register of slaves necessary to secure the property. The register might be kept by the Kazi, who should collect the tax, and all slaves omitted to be registered should be held free, if they claimed their liberty, or should belong to the informer who discovered the attempt at deceit. In the Table I have only mentioned the able-bodied males, and I have here found

it also impracticable to separate entirely the domestic from the agricultural portion, on which account the whole has been mentioned in this place. All the slaves are either of the Dhanuk or Rawani castes. Free men of the former caste, if very poor, sell their children, but in this district this is not done by the Rawanis. The slaves here are in general industrious, seldom run away, and are seldom beaten.

I have procured no estimate of the mere domestic slaves, either male or female, that are kept by Muhammedans of rank, and of which class I have given an account in treating of Puraniya. There are no doubt many such, as the chief persons in the district are Muhammedans, and some of them have, I understand, dealt in this commodity to a ruinous length. I saw two Abyssinian boys in the train of one person of rank, and he told me he had commissioned them from Calcutta on account of the character for fidelity, which this nation holds throughout the East. In the division of Munger alone I understand that the Moslems have 50 male, and 70 female domestic slaves (Golam and Laundis).

The number of common beggars, that were estimated to be in the district, amounts to about 4000. I have certainly no where seen this class more numerous ; and in general they are real objects. Near the great road, however, and especially near some houses that were erected by Colonel Hutchinson, and are now frequented by European travellers, the people, as I have said, have adopted a most shameful system of mendicity. Many, who are no objects, come with trifling presents, and usually preface their request by observing, that they were plundered by the last European who passed. Among such rogues I found no less than an invalid and two invalids' widows, who were receiving an ample subsistence from the Government. The real objects, as I have said, are abundantly numerous, and very thankful. In general they have small huts, and are not destitute of food, so long as they are able to ask for it from door to door ; but when sick or infirm, they are in general totally neglected. Many poor persons, however, lame and blind are sheltered by their kinsmen, and taken care of when unable to beg ; but as their kinsmen are

straitened, such are very naturally considered objects of charity, and procure from that source their common means of subsistence. It is those alone, who have no near kindred, that are suffered to perish from neglect ; and this is more owing to the doctrine of caste than to a hardheartedness among the people. The Muhammedans are therefore more distinguished for real charity, than the Hindus ; and I mention with satisfaction the goodness of Sheykh Zayedali, a small Zemindar near Mungger, who supplies all the infirm poor, that live near him, with food. Mohan Das a wealthy religious Hindu mendicant of Lakardewani is entitled to the same praise. The number of sufferers is however great, and would shock the most hardened nation of Europe.

Among the beggars may be enumerated 15 Hijras or eunuchs living in five societies at Mungger, one society at Bhagalpur, and one society of five at Rajmahal.

Prostitution is much on the same footing as in Puraniya. The number of common prostitutes is uncommonly small, and in general they make a very poor living. One old bawd at Paingtgi is supposed to be very rich, and the chief man of the village, a Hindu, has formed a connection with her. His kindred are growling and threaten to fine him, but would be pacified with that, as his connection has given him much power. All the prostitutes are Muhammedans, except two or three houses of Ramzanis settled in the capital, and a few called Kheloni in Bangka and Lakardewani. Among the Hindus a somewhat larger proportion of widows remain single than in any of the districts hitherto surveyed, not from choice nor from being of an improper age, but from the custom of the country considering a contract with widows as very disgraceful. In some parts it was stated that there were a great many intrigues (Khanagi) among women of this description, and among such as were deprived of the comforts of marriage by the absence of their husbands on service. Such reports were however confined to a few places, and in general the women of this district have a very fair character.

The men of this district are exceedingly addicted to intoxication, and, particularly in the interior, are very slothful. They are less charitable than in Dinajpur, but

less addicted to robbery and theft. Yet there are many pilferers. The men are excessively jealous of their women, which leads to frequent murders. They are also of a most suspicious disposition with respect to the views of every person in authority, which one might not have expected, considering the uncommon kindness with which they have been treated, but they are conscious that their burthens are nothing, and cannot be brought to think that Government will preserve its faith. I may venture to say, that no people on earth has less regard to truth than themselves. Their men of business are only remarkable for chicane, in which they are complete adepts. In the interior I found the people uncommonly obliging, and my wants were cheerfully supplied ; but everywhere near the great road, I heard of nothing but difficulties, raised entirely for the purpose of enhancing the price to an extent, of which my attendants most bitterly complained. In fact this is a point that loudly calls for regulation.\*

## CHAPTER 3RD.

### ON THE EDUCATION OF THE PEOPLE.

The schools for teaching to read the languages spoken by the Hindus, and the progress made are very near on the same footing as in Puraniya, only the number of teachers is smaller. In some parts, however, the Guru instructs the boys only in the mere rudiments of writing and arithmetic, by instructing them to form their letters and figures, on a board, with a reed and white ink, made of powdered mica. The boys are afterwards taught, by their parents, to write on paper, and to keep accompts. The teachers, where the Hindi language prevails, are called Gurus ; but, where the Bengalese dialect is in use, they are called Pandits, a name, which in most parts of Bengal and Behar is confined to men of more exalted science.

In by far the greater part of the district the Hindi character and dialect almost universally prevail ; except that a few rude tribes still retain languages peculiar to themselves, which appearing to have derived very little from the Sangskrita, may be considered as pure aboriginal Hindu dialect, these tribes having in their appearance nothing of the Chinese nor Tartar race. The Hindi spoken in the better cultivated parts of the district differs no more from that of Mithila, than is usual in different parts of Puraniya, and the pronunciation is nearly the same. Among the hills and woods the accents vary much, and each tribe, even of those, which have adopted the Hindi dialect, retains many obsolete or strange words, besides an uncouthness of pronunciation, so that many of them are almost totally unintelligible. Even in the part of the province of Bengal, that is contained in this

district, the Hindi dialect, called Khotta, by the Bengalese is very prevalent. In Paingti, Rajmahal and Phutkipur there are more Khottas than Bengalese. In Furrokhabad they are about equal. In Pratapgunj and Aurunggabad the Bengalese is by far the most prevalent. In Kalikapur and Chandrapur, scarcely any speak Hindi. In the north part of Lakardewani the Hindi, and in the south part the Bengalese is the most predominant ; but both so corrupted by the accents and uncouth phrases of rude tribes, as to be with difficulty recognisable. The Bengalese usually spoken in this district is of the Gaur dialect, which extends along both banks of the Bhagirathi from Gaur to the sea; but differs considerably in different places. The people of Calcutta, who speak the dialect of Gaur, although confounded by the pride of the west with Bengalese, in their turn, as usual, ridicule the accent of the people of Dhaka, who are the proper Bengalese ; and Calcutta being at present the capital, the men of rank at Dhaka are becoming ashamed of their provincial accent, and endeavour to speak like the Babus of the former city. In the southern parts of Lakardewani and Bangka the Bengalese resembles that of Virbhumi, which is a part of Angga. The revenue accompts in the province of Bengal are kept in Bengalese even at Rajmahal, where, as I have said, the Hindi language is most prevalent.

The Bengalese of this district, as elsewhere, call their polite or poetical language Prakrita, and the books in it, which they most usually study, are those written by Kavikangkan and Kasi Dasi. None of the women can read the common character, and very few understand the poetical language when it is read by others.

In this district those who use the Hindi dialect in common affairs, write the Nagri character ; and the highest ranks, even the Pandits, both in common discourse and epistolary correspondence on ordinary affairs, employ the language that is commonly spoken, and is intelligible to the vulgar. It is promiscuously called the Bhasha or Desbhasha, and no books have been composed in it. The compositions which they possess, that are not in pure Sangskrita, are all so mixed with that language, as to be unintelligible to the vulgar ; and this language

also is called Bhasha. The Ramayan of Tulasidasa is the one most used, and is much more read than understood. I am told, that of sixteen people who read it, two may understand it completely ; four may understand some sentences ; ten understand a great many words, but are ignorant of so many, that they do not know the meaning of any one sentence. Among the Brahmans and higher classes are some who understand the meaning, although they cannot read any character. This is the case with all the women, who understand the poetical language ; for none of the female sex have been instructed to read. The other books in the poetical language that are in most common use, are Harischandra Lila, giving an account of a Raja named Harischandra, the Bhagwat of Lalach Halwai, mentioned in my account of Puraniya; and the Rasvihar, also mentioned in the same account. These three are more easily understood than the Tulasi Dasi, and even the vulgar understand a considerable part of Harischandra Lila. On this account probably it is that they are little esteemed.

The Prakrita, which is supposed to have been the language of Ravan, and of his subjects the monstrous cannibals of Langka, has been, I believe, considered as the same with the old dialect of Magadha. If that be really the case, it has been nearly banished from this part of its original seat ; as the Pandit of the mission heard of one Brahman only who pursued its study. This person, Nityananda Jha, of the Mithila nation, resides at Bhagalpur, and is esteemed as a man eminent for learning.

I have already mentioned that Major Wilford considers the Pali of Ceylon and Ava as being the ancient dialect and character of Magadha. That language has undoubtedly the strongest affinity with the Hindi and Sangskrita, but the character has been totally lost. I have mentioned one small inscription (Drawing No. 8), which, I imagine, is a remnant of this ancient character ; but every person in the district to whom I have shown it, alleges that he never before saw any such writing. In this district most modern inscriptions are in the Tirahuti character, but Sangskrita books are usually written in the Deva Nagri. Many people imagine that this is the

proper character of the Sangskrita language, but that must be confined to some of the countries, where the Hindi language is spoken. In all other parts of India the Deva Nagri is very little used in writing Sangskrita ; and even in Mithila, where the Hindi language prevails, a different character is used in science. I do not recollect any old inscription in which the Deva Nagri is used. All the characters of India, ancient and modern, have many things in common ; but I suspect that the Deva Nagri now in use is a very modern form of the Hindu character.

The state of Persian literature is here much the same as in Puraniya.

On the whole, it must be observed, that the people of this district have rendered themselves fully as well qualified for transacting ordinary business as those of Puraniya ; but the various offices are not so respectably filled. The men of business in this part, especially in the vicinity of Bhagalpur, are fond of emigration, and most of those who have any intellect or industry, seem to have found their way to Calcutta, where some of their countrymen, having risen to eminence, afford them assistance. Those that remain, especially in Magadha, my native assistants have found uncommonly stupid. In Gaur and Mithila they are more acute.

The education of the Zemindars and other land-holders, has been fully as much neglected as in Puraniya.

In the plan of education here, science, or any study that can enlarge the views, or improve the heart, has been most deplorably neglected ; and the chief object seems to have been to lay in a stock of chicane, in which even the most stupid are very profound adepts. I have been often tempted to think that the stupidity was feigned, as a cloak for design ; but my native assistants, who must be better judges than myself, are of a contrary opinion.

In Table No. 12 will be found the result of my inquiries respecting the extent of common education in this district, and in the first Statistical Table will be found a list of the schoolmasters or teachers.

The science of the Arabs has not been so totally neglected as in Puraniya.

Muhammed Fayek, of Bhagalpur, is the head of a very respectable family, of which there are now 20 persons, all called Moulavis, and who all instruct pupils in Arabic. Their houses are called Mudursahs. The family has considerable endowments in land, and the Moulavis take no fees for instruction. Their pupils amount only to 40 young men. Muhammed Fayek is a person highly and justly respected by his countrymen, exceedingly affable and unaffected in his manners, obliging and communicative to strangers, and said to be well skilled in Arabic lore.

In Suryagrha two brothers, Golam Mortuja and Golam Hoseyn, who have a large free estate, have endowed a Mudursah, and employ a Moulavi to instruct youth in Arabic and Persian literature. These two men affect an uncommon sanctity of manners, and avoid strangers; nor do I know what proficiency the person employed by them has made in his studies.

Muhammed Hayat, of Bhajuya, near Gogri, has an endowment, and instructs seven youths in Arabic, Persian, and the Koran. He as usual takes no fee, and gives food to such of his pupils as choose to avail themselves of his liberality. He is Kazi for an extensive district, and has hired an assistant to enable him to instruct the youth. It was alleged that his knowledge of Arabic, is not profound, and that an interpretation of an inscription, with which he favoured me, was not accurate.

Muhammed Fayek says, that none of the Kazis know Arabic or grammar, and that they have made very little progress in a knowledge of the law. In general they know a little of Persian literature; but this is the extent of their knowledge. Many as usual read the Koran, who do not understand a word of it.

From the small number of professors who teach the three great sciences of the Hindus that is, grammar, law, and metaphysics, and who amount to only 14, as will appear from the first Statistical Table, it will readily be perceived, that such learning is here at the lowest ebb. Three of the professors, I understand, are men distinguished among their countrymen. First, Ramram Nyayalangkar, a Bengalese Brahman of the

Rarhi division, who resides at Bhagalpur and teaches the grammar called Sangkshiptasar, and the law of Raghu-nandan, and explains the Sri Bhagwat. Second, Nityananda Ojha, a Maithila Brahman residing at the same place, teaches the grammar of Panini as improved by Bhattoji Dikshita, and the law as explained by both Sulpani and Raghunandan, and he also explains the Bhagwat. Third, Radhacharan Vidyavagis, a Brahman of the Rarhi divison of the five tribes of Bengal, who has settled at Kalapur in the division of Ratnagunj. He teaches the same grammar with the first mentioned Pandit, and some books on law called Kavya. There are many such, which are not allowed to have been written and entirely composed by mere men, while the works of Raghunandan, Sulpani, and others merely detail the laws promulgated by the Gods and Munis, with an explanation, such personages having chosen the style unintelligible. It is only such commentaries that are entitled to be called Smriti. The entire compositions of mere men, however they may adhere to the law, are called Kavya. These in most common use here are Bhatti-Kavya written by Raja Bhartrihari, brother of Vikrama, Raghu-Kavya composed by Kalidas, Kumar-Kavya by the same, and Magh-Kavya composed by a Magh Raja. This person having invited many Pandits, he requested each to favour him with a few verses on law. In order to ascertain the value of these, the Raja collected the whole, threw them into the fire, and only admitted into his code such as passed unhurt through this ordeal. Kalidas is said to have been one of the Pandits assembled. The learned professor of Kalapur explains also the purans, and instructs youth in the mysteries of Jyotish, in the rational part of which he is considered as an adept, but so far as I can learn he does not pretend to any farther powers than to note and calculate nativities and fortunate times ; for without adopting such mummeries, which he probably despises, no reputation can be acquired. Only one man pretends to teach metaphysics. The other teachers are considered by the Pandit of the survey as very shallow. Besides Radhacharan, three Pandits teach Jyotish, but aim at no higher science, nor are they esteemed men eminent even in their own art.

Besides the teachers, there are in the whole district about 50 persons called Pandits, who have been educated regularly in grammar and law ; none of them, have studied metaphysics ; but most of them, if not all, have a smattering of Jyotish, so as to be able at least to calculate nativities and fortunate times. One of them, Gauridatta Pathak of Munger, the most sensible man that I have been able to find in that vicinity as an assistant, constructs almanacks.

Sambhunath Ghosh, a Bengalese Kayastha of Champaigar, and one or two Baidyas in the S. E. part of the district, have studied Grammar, but in general this and the higher sciences have been entirely reserved to the sacred order.

The Brahmans in the western parts of the district have reserved to themselves the exclusive privileges of acting as astrologers, soothsayers, and wise men (Jyotish). In the eastern parts the Daivagnas of Bengal have made some intrusion on this valuable branch of science, which is here by far the most profitable. Among the 50 Pandits above mentioned, 40 may practise this art, and perhaps 15 more are practitioners, without having received an education that entitles them to the degree of Pandit. The common Dasakarma Brahmans can tell fortunate days for marriages, building houses, cultivating land, or such trifles. These men can read, but do not understand any composition in Sangskrita. The Daivagnas of the east possess nearly a similar state of knowledge. Medicine is in rather a more creditable state than towards the east. About 270 Sakadwipi Brahmans and a few Maithilas practise medicine. They in general know more or less of Sangskrita, and have some books treating on diseases and remedies, and written in that language. A great part is committed to memory, and a Slok or couplet is on all [occasions] quoted as of divine authority to remove all doubts, and to astonish the multitude, who do not understand a word of it. In fact, what I have said concerning those in Puraniya is applicable to those here. At Bhagalpur, Munger, Rajmahal, and Pratapgunj, are men who have regular practice. In other parts they are hired as servants, and receive monthly wages, amounting to from 10 to 20

rupees, partly given in land. In this district I did not hear of any other practitioners of medicine, who possessed anything like science, except eight men in Rajmahal, partly Brahmans, partly Kayasthas of Bengal, and partly Muhammedans. The Baidyas here have entirely relinquished the profession of medicine. The practitioners who exhibit medicine without having books, and in general without being able to read, are called by various names as in Puraniya. In the whole district there may be of such 600, some of whom are old women.

In the three chief towns are about 20 Jurrahs, who evacuate the water of hydrocele, treat sores, and draw blood both by cutting a vein, and by a kind of imperfect cupping. They are by birth barbers.

The midwives are the women of the lowest castes, and merely cut the umbilical cord. The low people, who cast out devils, cure diseases and the bites of serpents, and oppose the influence of witchcraft by incantation, are exceedingly numerous. In some parts the same person pursues all branches of this profession, in others he confines himself entirely to some one. On the whole, there may be about 15 or 16 hundred persons who pretend to a knowledge of this mummery. The low castes, that eat pork and drink spirits, are supposed to have most skill in devils.

A branch of these wiseacres practise inoculation for the small-pox, and with the utmost success. The number stated to belong to this district is about 30, but many practitioners come from adjacent districts. It is not here the custom for the inoculator to repeat prayers. Some Brahmans and makers of garlands perform this office. I am informed that of those who are seized with the spontaneous disease, not above one in twenty dies. The operation is managed exactly in the same manner as in the districts already surveyed, and is attended with the most complete success, very few indeed dying. This success and the general adoption of the practice render the introduction of the vaccine of very little importance. Mr. Hogg at Munger employed as subordinate vaccinator, cannot procure one person to bring a child without a bribe. It is true that bribe is not high, being one ana or not quite

two pence, or about a day's wages for a common labourer. One from this might be led to suppose that parents here are little interested in their children, when such a trifle can induce them to submit their offspring to a practice which they consider in any degree objectionable. I do not however see any other mark of such want of affection ; on the contrary, the parents of this district seem fully as fond of their children as anywhere else, and to the amount of the bribe we must add the saving of the fee, that would be given to the inoculator.

In this district witchcraft (Jadu) is supposed to be exceedingly common. The people in the parts hitherto surveyed did not mention it so much as here, but whether from believing in it more or less I cannot say. My native assistants seem to think that they concealed their belief from an extraordinary fear ; for not one of themselves seems to have the least doubt of the frequent practice or reality of the art. I suspect however, that in reality the people there are not so much afraid of the art as here ; for they seemed much more communicative than the people of this district, and the only talk that I heard of it was in Kamrup, especially at Goyalpara, where the women were accused of using witchcraft for deluding their lovers. Much more desperate and unjustifiable views are here attributed to the witches, and occasion very great alarm to most parents. The witches (Dain) here also are supposed to be women, some young and some old. Their supposed practices would appear to be from pure malice. It is thought, whenever one of these witches sees a fine child, by means of imprecations addressed to some unknown gods, who are pleased with such worship, that she destroys its health, so that it pines away, and is deprived of reason, or dies. Unless the witch knows the real name of the child, her imprecations do no harm. On this account children are usually called by some nickname, and their proper one is concealed ; and, as most parents think their children fine, almost every one is alarmed, when in play his children go out of sight. The children however are generally fortified by hanging on them something that is considered as a charm against spells. At Bhagalpur it was stated to me, that about 25 children are supposed

annually to perish in that town from the malevolence of these witches. Some poor women, it may be suspected, are not unwilling to be considered as witches ; for, after they acquire this character, parents are alarmed whenever they approach ; and, after having concealed their children, give the Dain some present to induce her to go away.

## CHAPTER 4TH.

### RELIGION AND SECTS.

J Calculating in the same manner as I did in Dinajpur, and including the hill tribes among the Hindus, I reckon the Muhammedan population at 23 per cent. of the whole, or at about 4,58,000 persons; In the 5th Statistical Table will be seen the result of the calculation for each division, and also the various proportions of Muhammedans and Hindus in different parts of the district.

#### SECTION 1ST.

##### *Of The Muhammedans.*

The number of Moslems seems to be diminishing, although converts are occasionally made, because they have less encouragement and means of subsistence than formerly. Although by far the greatest landholder is a Moslem, he seems far from encouraging the faith, and perhaps regrets the change of his family religion ; for in some parts of his estate, of considerable extent, there is scarcely one of the faithful. The same mutual adoption of each other's religious practices, that exists between the Moslems and Hindus of Puraniya, prevails in Bhagalpur. The Kazi of Mungger and Kharakpur had never heard of the Satya Pir. I suspect therefore, that this object of worship, common to the Hindus and Moslems, is peculiar to Bengal ; but at Mungger the Hindus pray occasionally to Satya-Narayan, repeating verses in the dialect of Bengal.

In the topographical account of the division I have had frequent occasion to mention the irregular manner

in which the Kazis have been distributed and appointed. Two of the most essential duties of these officers, the taking charge of distrained property and the payment of small pensions, are in this district very seldom entrusted to their care. The former seems to be attended with some inconvenience, as an officer of respectability to watch over distrained property seems highly requisite, and the Kazis are in general men much superior to the ordinary native officers of police and law. Their duties are now confined to the performance of ceremonies and the attestation of deeds, and they have been deprived of the profits arising from the sale of stamped paper, which has been given to the Zemindars. The propriety of this also seems doubtful. In fact the Zemindars require no additional advantages, and do not in general deserve encouragement, while the Kazis are the best behaved and well bred men in the country, and every encouragement that could be given to them would be well bestowed. A regular establishment of one for every division and a necessity imposed of his attestation to all solemn contracts, especially in the transfer of landed property, mortgages, and marriages, and the actual appearance before him of the real parties, or at least of agents legally appointed before another Kazi to carry on the transfer of property, when the principal resided at a distance, seems to be highly proper, in order to check those transactions under feigned names (Binami) which are so great an evil and disgrace. The people on free estates should be equally liable with those living on [land] assessed to the jurisdiction of the Kazis, and should pay the same fees, which at present they refuse to do. In some parts the Zemindars complained that they had originally appointed the Kazis, and shared in their profits. Mr. Fombelle, they say, altered this without giving them a compensation. I suspect that they still too often find means to influence the appointment, and have no doubt, from Mr. Fombelle's character, that their claim for compensation was totally groundless. The Kazis seem to have no regular mode of conducting business. In some places they have regular deputies, called Nayebs or Mollas, who officiate for certain portions of their respective jurisdictions. In other cases they depute a person for each

occasion, when personal attendance would be inconvenient. They do not in general, at least in Kharakpur, consult the people in the appointment of Mollas, and there are no people of this description except the few who act as their deputies. I have not learned that any person in this district acts as a Mirmahalut. The lower excluded castes have Mehturs or Serdars, who settle the business of their associates in public assembly.

The office of the Pirzadahs, who admit people into the order of Murids, is somewhat like the confirmation of the church, or the Upades of Hindus, and seems more respected here than in the districts hitherto surveyed, although the number of those who profess themselves Murids is by no means greater. Considerable establishments have been granted to the families who enjoy the office, which is hereditary, and they seem to perform their office for many people who do not reside. I heard of no persons called Khondkars. I suspect that it is a term used in Bengal for those who are here called Pirzadahs.

All religious mendicants, Hindu and Moslem, here as well as in Puraniya, are called Fakirs and Padres ; but I shall confine the term Fakir to those of the faith in Muhammed.

The Fakirs in this district are much on the same footing as in Puraniya, but are not so numerous, as I am told that they may amount only to between 550 and 600 families, mostly married ; but the country is overwhelmed with vagrants of this name, most of whom want women, and are Benawas. The residents seem to be in general less amply provided than in Puraniya.

There were four great founders of the order of Fakir, and every person of this profession belongs to the sect of some one of these four doctors. These four sects have again branched out into 14 orders, and every Fakir belongs also to some one of these ; but the orders again have branched out almost *ad infinitum*, and the ignorant are in general only acquainted with the subordinate rule to which they pretend to belong. A great many of the Fakirs are here called Arzanshahi, from a holy man of Patna, who founded a rule. After having

resided some time at Patna or Azimabad he went to Wordi, and on that account many of his disciples are called Shaharwordi Fakirs. A disciple of this saint, named Mortuja Shah Anund, settled at Sutigram in the division of Pratapgunj, and founded a new rule of Fakirs, called Mortuja Shahi, after his name.

These two are the most common sects here, but there are also some Julali and Madaris.

The Benawas are divided into two classes, Gudri-posh and Benawas proper. The Gudriposh dress in rags sown together, and derive their origin from a certain Benawa named Gadanarayan, who added this extravagance to the rules of severity, which the common Benawas observe. They have no women, and beg for their daily subsistence, preserving nothing for to-morrow, and sleeping under trees, or accidental shelter.

The Madaris should not keep women, dress in dark coloured clothes covered with ashes, and do not shave their heads nor beards. Muhammed Fayek says, that Budiuddin, who founded this order, did not live at Mudinah, but at Mukunpur near Lakhnau. The Julalis ought to cover themselves with ashes, but do not seem to be excluded from women. They eat serpents and centipedes, and burn their bodies with balls made of charcoal, and torment themselves with iron spikes. The tomb of Julal of Bukhari their founder, is at Kuriaungch in the Sikh country.

The people here seem more attentive to prayer and ablution than even in Puraniya. In Mungger the Kazi says, that from one-fifth to one-fourth of the whole perform these ceremonies at the five stated periods, and many more once or twice a day ; but I believe, that in other parts of the district there is a much greater relaxation. Pilgrimage seems far from being fashionable ; but I heard of two persons who have been at Mukkah. I met several who pretended to be on the way, and on the strength of their intentions levied contributions from the charitable. I suspect, however, that they never meant to leave the banks of the Ganges.

Many people, as I have said, are diligent readers of the Koran. The fasts are far from being regularly observed, and are neglected much, as in Puraniya ; and many of the faithful drink spirituous liquors.

The Mohurrum is observed by both Moslems and Hindus, much as in Puraniya; but only one of the latter, the Sultangunj Rani, makes a pageant; many send offerings. The number of Shiyas is very inconsiderable; but either their zeal, or the intolerance of the Sunnis this year, during the celebration of the Mohurrum, was near occasioning an open rupture. On this occasion the Shiyas curse Omur, Abubukur and Osman, whom the Sunnis regard as saints, and are of course exceedingly enraged, although it would appear that the Shiyas perform their curses in places of worship peculiar to themselves, to which the Sunnis have no occasion to go. This year the Mofti of the court of circuit was a Sunni; and, it is said, procured an order from the magistrate to prevent the Shiyas from following their usual scurrilous practice. This gave great offence, and a tumult was likely to have ensued, had not a battalion of sepoys happened to march into the town. They were delayed a day, which kept everything quiet.

✓Concubines (Nekahs) are always united to their keepers by a religious ceremony, and their children are entitled to a share, even if there are children by a virgin spouse. The children by slave girls have no claim, if there are any legitimate children or near kindred.✗

The doctrine of caste is fully more extended among the Moslems here than in Puraniya.

The Saiuds are very numerous, especially at Bhagalpur, and in Suryagarha. At Rajmahal the chief family of Zemindars, who before their conversion were Brahmins, contend that on that account they are entitled to be called Saiuds, and the influence which the family possesses, has on the spot produced an acquiescence; but in other parts none are called Saiuds who are not supposed to be descended of the prophet. It is thought, that in the whole district there may be 2300 families of this kind.

The Moguls are less numerous, amounting only to about 900 or 1000 families, about one-half of whom are settled in the capital.

The Pathans amount, it is supposed, to about 3400 families, of whom a large portion is also settled in the capital.

These three tribes form a kind of gentry, none of whom chooses to apply his hand to labour ; but they do not enjoy the high privileges with which they have been indulged in Puraniya.

The bulk of the Moslems, who here also are called Sheykhs, chiefly employ themselves in agriculture.

Of the tradesmen, who in this district are excluded from intermarriages with the Sheykhs, I heard the following mentioned.

Momin-Jolahas or weavers, about 4300 families. Tape weavers and string knitters (Patwars) 140 houses ; and three weavers of cotton carpets are also excluded.

Cotton cleaners (Dhuniyas), 1680 families.

Those who prepare and retail curds are here called Jat and amount to 100 houses, confined to the division of Fayezullahgunj.

Taylors about 330 families.

Washermen about 108 families, besides five families that scour shals.

Barbers about 45 families. To these belong also 20 families called Jurrah, who are a kind of surgeon-barbers, that have been already described.

Butchers, including those who kill both beef and mutton, about 45 houses.

Gelders (Abdal), 35 houses.

Horse shoers, here called Nalbund 2 families.

Cutlers, 28 families, are the only workers in the metals that are excluded.

One family which makes ornaments of lac ; 25 families who make ornaments of glass, and about 7 families of turners are excluded. Painters of two kinds, Patwar and Rungsaz, are generally excluded, there being 13 families of the former, and 20 of the latter ; yet I found even a descendant of the prophet employed in this occupation, and not disgraced.

Ninety-six families of paper-makers ; and 20 families of those, who prepare tubes for smoking tobacco, are excluded. Eighty-seven families of dyers are excluded. A good many Beldars or pioneers have been converted, and still keep a separate caste. I heard of about 150 houses.

In this district no Muhammedans are fishermen ; but there are about 280 families who retail fish, and are

called Mahifurosh or Pajari, and are excluded. Twenty families are excluded, because they live by catching birds and managing hawks, and are called Mirshekars.

Sixty-six families of Mukeri are excluded on account of being petty dealers in grain, and about 1450 families (Kungjra), because they retail greens.

Five families, that retail the charcoal balls used in smoking tobacco (Tikiya-furosh), about 280 families, who retail tobacco prepared for being smoked, and 47 Bakhos and 80 Besatis, who retail spices, are also excluded.

Eighty-six families of Bhathiyaras, who keep inns (Sarays) are excluded from communion, and also about 16 families of bakers.

The Moslem bards (Bhat) are excluded, and amount to 17 families. The Damphalis, who are excluded, amount to above 140 families. Here they not only play on the Damph and beg, but hawk trinkets and spices. Eleven companies of Hijras or eunuchs, may be placed in the same class, as they are mendicants. Twenty houses of Dhotis are musicians, but do not beg.

There are 32 families of Bhangri, whom I took in Puraniya to have been jugglers : but I am told, that they are mendicant wits, who amuse the people by making wry faces and gestures, and singing ridiculous songs. Four houses of Badiyas play tricks with serpents, and no less than 63 families of Chambas tame monkies and bears for the amusement of the public, and do not torment themselves as in some other parts.

The Helas are a low class of Moslems, the men of which here keep dogs, and the women are midwives to the rich. I heard of only four families. The accounts of this caste that I received in Puraniya were rather contradictory, and no one here speaks with certainty concerning people considered so vile. A great many of the female attendants, that European ladies can procure in India, are said to be of this class.

The Muhammedan women of loose character are excluded from communion, and amount to about 112 houses. Besides these, 10 families of a higher class of dancers and singers, called Piranis, are to be found at Rajmahal where they pretend to exhibit before persons of high rank only.

## SECTION 2nd.

Of the Hindus.

I shall first, as formerly, give an account of the tribes and castes, and then conclude with some general observations. In enumerating the castes, I shall in general follow the order of rank which each holds in the western part of the district, formerly a part of the province of Behar; and this order differs much from that observed in Bengal; for the sake of connection, however, I shall treat of the analogous tribes of Bengal in the same order, although in the part of the district, which belonged to Bengal, the order of precedence is very different, as I have had occasion to mention in my account of Puraniya, to which I shall refer, whenever I have nothing new to offer on any subject.

To begin with the sacred order, Major Wilford says, (*Asiatic Researches*, vol. 9, page 74), that all Brahmans are of two kinds, Kanyakubja and Sakals, who came from Sakadwip. With respect to the former he also says (page 92), that the Brahmans acknowledge that they are not natives of India, but came from the N. W. and that Kanoj was their first settlement. The Pandit of the survey has procured a book, called Rudrajamal, supposed to be composed by Siva, and published by Parasuram, who delivered it to the Munis or sages of old; but the man by whom it was made known to sinners is not known. In this book it is stated, that the Brahmans came from Sakadwip to Jambudwip, and after some generations went to Kanyakubja. After some generations again they dispersed over different countries, as the Dakshin, Angga, Bangga, Kalingga, Kamrup, Odra, Bata, Magadha, Barandra, Chola, Swarnagrama, China, Karnata, Saka, and Barbara, according as they were favoured by different Rajas.

शाकद्वीपात्सुपर्णेन अनीतो द्विजपुंगवः । शाकद्वीपीति विख्यातो-  
जम्बुद्वीपेत्र भूवह । तस्यपुत्राश्च पौत्राश्च कान्यकुब्जसुपाश्रिताः । तेषां पुत्राः  
प्रपौत्राश्च मानवा दक्षिणात्यकाः । अंगवंगकलिंगस्याः कामरूपास्तथापे ।  
ओड्स्याः सप्तदेशीयाः वातायां मगधेषु त्र..... । वरेन्द्रौ चोलदेशेषु च  
स्वर्णग्रामेत्यैव च । चीनदेशे कर्णादेशे शकेषु वर्वरेषु च । अनीताल्लक्ष्मैः स्वत्र-  
द्विजास्त्र निवासिनः ।

This book mentions no other Brahmans. I am also informed by Gauri Datta, a Saryuriya Brahman of Kanoj, the most intelligent man whom I could procure to assist me in making this account, that in the Vishnu Puran it is mentioned, that all Brahmans were originally of Kanoj, and were afterwards divided into ten nations, according to the countries in which they settled. Major Wilford also has been informed, that the colony from Sakadwip first settled in the country called Kikat or South Behar, to which they communicated the name Magadha, from their ancestor Maga. Nor does this contradict the report of the Rudrajamal ; as the descendants of those, who remained behind in Kikat, might retain the original name of Magas or Sakadwipis, while the more successful colony of Kanyakubja is considered as the common source of the sacred order of this miserable world (Jambudwip). What country may be meant by Saka, I shall not take upon myself to say. From its being surrounded in Hindu legend by a sea of milk, I suspect that it is imaginary ; but Major Wilford seems to think that he has been able to trace it in the west. In the country occupied by the Magas was first taught the doctrines of the Bouddhs, which has been spread even to China, and in Ceylon, Ava, Siam, and Thibet has been accompanied by the original legends and written characters of the Gangetic plains ; but I cannot agree with Major Wilford in supposing that the inhabitants of these countries are descended from the Magas ; in my opinion the countenance of the rude tribes of both countries, as well as of the more polished and intermixed nations, mark them clearly as distinct races of the human species. In the following account of the sacred order I shall first mention the Brahmans of the ten nations derived from Kanyakubja as the most important, and then return to the Magas and Sakals.

The extreme difficulty of coming to any fixed or rational conjecture concerning the transactions of a people who have no history, may be well exemplified in the opinions which I have given concerning the original seat of the nation of Brahmans called Gaur. In my account of Dinajpur, I supposed it to have been in the west of India ; but, when I reached Puraniya, a tradition current

in that country induced me to change my opinion. Major Wilford however says, that the term Gaur in Hindu books is never applied to Bengal as a province, but to the city alone, as being the abode of the deity Gauri, whose temples I have mentioned in my account of that city ; and he farther says, that the proper Gaur (Gauda as he writes it) is on the banks of the Narmada in Malava. In this district, at any rate, about 36 families only of Gaur Brahmans have settled ; but 25 of them reside at Rajmahal, in what is now reckoned Gaur. They are of the sect of Vishnu, and their Guru resides in Brindaban, being of the Radhaballabhi school, which implies their worshipping Vishnu under the form of Krishna. Most of them here, as well as in Puraniya, are men of the world, chiefly merchants and shop-keepers; but five of six of them have images, and act as Gurus and Purohits for several tribes from the west of India.

The Maithilas are by far the most numerous of the ten nations of Brahmans, and amount to between 5 and 6000 families. About a tenth part of these have taken up their abode in the part of this district, which belongs to the province of Bengal. The remainder reside in the western and southern parts of the district, and seem to have acquired as complete an ascency in Magadha as they have in Mithila. In the two countries they follow very nearly the same customs which I have described in the account of Puraniya. The only difference which I perceive is, that the Brahmans, who officiate in temples, are here usually called Pandas, but this term is also bestowed on priests of the lower tribes. In the south it seems confined to the Sudras, who are dedicated to the worship of Siva.

Of the five sacred tribes introduced from Kanyakubja by the Hindu kings of Bengal there may be 500 families, of whom nine-tenths at least belong to the Rarhi division, and not a tenth to Barandra ; for Bollal Sen assigned all the portion of this district that belonged to the province of Bengal to the Rarhi Brahmans. Almost a half of this division however, has settled in the part of the district which belongs to the Mogul province of Behar. Besides these, there are from 2 to 300 families who, by officiating for low tribes, have in the S. E. part of the district degraded themselves to the rank of Varnas ; and some

who officiate for the Kaibartas, and are called Patits, or sinners.

Only three houses of the Baidik Brahmans of Bengal are to be found in the whole district.

Of the Brahmans, who retain the title of Kanyakubja, there are between thirteen and fourteen hundred houses. Some of them call themselves merely Kanyakubjas; but others distinguish themselves by the subordinate and inferior denominations of Antarbediya, Saryuiya and Sanoriya. They go in carts drawn by oxen, as in Puraniya; but few only of them are of the sect of Saiva, and they are very much divided among the different sects that now prevail. A great part of them have lands either free or rented, by the cultivation of which they chiefly live. Some of them give religious instruction to their own tribe, to Kshatris Rajputs and Kayasthas; but the Maithilas perform most of the ceremonies, which here as well as in Puraniya is the most profitable part of the sacred office.

Of the Saraswat nation of Brahmans are from 20 to 30 families, who live chiefly by officiating in the ceremonies of the high ranks from the west of India.

There is only one family of the Utkal nation.

Besides the Maithila and Kanyakubja Brahmans already mentioned, from 4 to 500 families of the sacred order have been degraded in the western parts of the district by acting as priests for the low castes; and between 2 and 300 by performing the office of Kantha, or Mahapatra, or Agradani; but some of these last are of the five tribes of Bengal. In general the nation, to which these degraded Brahmans belong is not known, and they are called by their office, or by the name of the tribe for which they officiate.

In this district none of the southern nations of Brahmans (Pangcha Dravir) have settled.

These are all the Brahmans that belong to the 10 nations, into which the sacred order is usually divided; but there is a kind of Brahman called Mathura, from the name of a city in Brindaban. They pretend, that they sprung from the sweet of Krishna. They live in what is called a pure manner, and confine themselves to officiate as Gurus and Purohits for pure tribes, or to cultivate land, which they rent or enjoy free. One of them has

some science ; but concerning this tribe I have not yet learned anything sufficient to enable me to enter into a detail.

Four families of Brahmans pretend that their ancestors were brought from Kraungchadwip by Dasrath, the father of Ram, in order to enable him to have a child. This Kraungchadwip is surrounded by a sea of melted butter, and is therefore far beyond the extent of my geographical knowledge ; nor have I anything to relate concerning these Brahmans, except that they instruct many of those who worship Ram, and are considered skilful in astrology.

In my account of Puraniya, and in the foregoing pages, I have given some account of the Sakadwipi colony whose emigration, when compared with that of the Kraungchas, is but a moderate walk. As I have mentioned, they are alleged to be the original stock of almost the whole Brahmans ; but it is only those who remained behind in Magadha, when their brethren removed to Kanyakubja, that retain the name Sakadwipi. Of these there are in this district from 2 to 300 families. They mostly practise medicine, by which they probably recommended themselves, when they arrived from their original country ; and most of them understand the books on their science, which are to be found in the Sangskrita language. In search of employment many of them go abroad to other districts, and a few have studied Persian, and entered into the management of worldly affairs. They act as Gurus, or religious instructors for themselves ; but hire Maithilas to perform their ceremonies. The people of the sect of Saur, who worship the sun, give much of their offerings to the Sakals, who are considered as peculiar favourites of the great luminary ; but most of the Sakals are of the Sakti sect. They are divided into 18 families, and a man cannot marry a woman of the same family with himself. They say, that in Sakadwipi there were four classes of men

तत्र पुन्या जनपदाश्चातुवर्णसमाधिताः । मगाश्चमागधाश्चैवमानसा  
मन्दगास्था । मगावालणभूयिष्ठाः मागधः चत्रियास्तथा । वैश्या  
स्तुमानसा शेयाः शूद्रास्तेषां तु मन्दगाः ।

First, Magas, from whom the Brahmans are descended. Secondly, Magadhas, who were the military tribe of the country. Thirdly, Manasas, who were the merchants ; and fourthly, Mandagas, who were the labourers ; but none of the three lower tribes came with the Magas from their original country. They still acknowledge the name of Magas. It is said, that an account of this tribe is to be found in the Samba-Puran, attributed to Vyas.

These Magas must by no means be confounded with the Magahis, Bhungihar or Zemindar Brahmans, yet these are undoubtedly the old subjects of the kings of Magadha, and are admitted by all to belong to the sacred order, although they never perform any of its peculiar duties. In my account of Puraniya I have given some account of this race, and when it was composed I thought that in this district I should have had an opportunity of clearing up many points, concerning which I found myself dubious. In this however, I have been in a great measure deceived ; for, although there are in the district at least 10,000 families of this tribe, they are uncommonly shy, and the very mention of the terms Bhungihar or Magahi, especially of the latter, puts them in a rage. In Major Wilford's account of the Anugangam, or country watered by the Ganges, I perceive a reason that may be assigned for their unwillingness to be called by their national name. The Pauraniks, says this learned officer, (*Asiatick Researches*, vol. 9, p. 62), allege, that " Ripungjay drove away the Brahmans ; and raised to the priesthood men of the lowest tribes, Kaibartas boatmen and fishermen, Patus, Pulindas, and Madrakas ; but these Brahmans were no better than Mlechchhas or impure and base-born men. These boatmen and fishermen, being used to live upon fish, would never give up their favourite food when raised to the priesthood, and their descendants the Bengal Brahmans live upon fish even to this day. The same circumstance is mentioned in the Vishnu Puran." The comment on the Brahmans of Bengal has probably been written by some person who was not aware, that of all the five northern nations of Brahmans, Gaur, Utkal, Kanyakubja, Maithila and Saraswat, it is only the first that are excluded from eating

fish, although many of all the nations reject this food from an idea of purity. The books to which the Major alludes, have therefore in all probability been written in the south of India. The Brahmans of Bengal cede to none, I believe, in either purity or learning; and this passage in the Purans seems in reality to be aimed at the introduction of the sect of Bouddh, to which the later Hindu princes on the banks of the Ganges belonged. As the doctrines of the Purans prevailed, and when this story had become current, the Brahmans of Magadha became ashamed of their country. The reason why they seem to be offended at the Hindu term Bhungiya, and to prefer the Persian synonym Zemindar, is, that in this district there is an exceedingly low tribe called Bhungiya, with whom they are afraid of being confounded. This Ripungjay Raja, who lived about the seventh or eighth century of the Christian era, is also said to have "exterminated the remnants of the Kshatri tribe, and to have filled their places with people of the lowest classes." Part of these I take to be the ancestors of the Bhungiyas, with whom this tribe of Brahmans is afraid of being confounded; but the Kshatriyas of Magadha had previously been destroyed, or driven out of the dominions of Mahananda king of India, who flourished in the fifth century before the birth of Christ, (*Asiatick Researches*, vol. 9, p. 37), and this prince placed Sudras in the room of these nobles or soldiers. I am inclined to suspect that the Zemindar Brahmans are the descendants of those Sudras, admitted by this prince into the military order; for their manners are entirely similar to those of the other tribes of military cultivators; and, as I have said in my account of Puraniya, they seem to be the descendants of the Brachmani of Pliny. Brahman, it must be observed in the languages of India, is not exclusively applied to the order of priesthood; but as I have said in my account of the religion of the Burmas, is applied to the new inhabitants of any land. Accordingly we find in Mr. Joinville's account of Ceylon, many colonies of Brahmans entering that island; but these Brahmans, instead of being priests, would appear to be industrious weavers; and it must be observed, that the title of the Brahman priesthood in their original country

is said to have been Maga; so that it was probably on their arrival in India as a new colony, that they received the name Brahman.

Great persons among these Brahmans are fond of being called Raja ; those who have estates assume the title of Zemindar, and those who are poor distinguish themselves by the name of the tribe to which they belong. These tribes are numerous, and somewhat resemble the old clans of Scotland, as all the members are supposed to have a common descent in the male line ; but they seem to have little attachment or respect for their chiefs. The nation is said to extend on both sides of the Ganges from Banaras to the frontier of Bengal. In this space I have heard of the following tribes. :—

1. Sriyar, whose chief is a Raja in Virbhumi.
2. Gautam, whose chief was Chet Singha, Raja of Banaras.
3. Domkata. The chief is the Raja of Tekari near Gaya.
4. Atharba. The chief is Raja of Bharathpur near Gaya.
5. Eksariya. The chief is Raja of Parsa in Serkar Saran.
6. Bahaudiyar. The chief is Raja of Betiya.
7. Sonbhadriya. The chief is a petty Raja near Gaya.
8. Betauriya. The chief is another Rajain that vicinity.
9. Pilichwar. The chief is another Raja of the same country.
10. Aniwar. The chief is the Saguna Raja in Tirahut, who pretends to be descended of Siwai Singha, king of that country.
11. Chakwars, who occupy Bailiya and Milki in Tirahut, and were long a very turbulent and predatory gang. Their chief has now only two or three villages.
12. Jaluvar, who occupy Bhusari in Tirahut. The chief now also is very petty.
13. Dhanawar. The chief, it is said, obtained Banaras when Chet Singha retired but

I suspect that the people here are not well-informed.

I have heard also of Beloche, Digwar, Surore, Harore, Nuniwar, and Yajowar; but learned nothing concerning their original seat. They do not acknowledge the division into ten nations that has been adopted by other Brahmans. In this district two-thirds of the whole have settled on the north side of the river.

Their Gurus are Kanoj Brahmans, Dasnami Sannyasis, and Ramanandis. They are therefore of the sects of Sakti, Siva, and Ram. Their ceremonies, here at least, are performed by Maithila Brahmans.

Before the time of Siwai Singha they acknowledge, that they all ploughed and worked oxen with their own hands; but those in Mithila having since been threatened with being reduced to the rank of impurity, should they persist in this iniquity, have given it up. The poor, however, even there do all other kind of work about their farms, and in Magadha they continue to hold the plough.

Besides these common Brahmans of Magadha, are between one and two hundred families, who call themselves Magadha Desi Srotriya Brahmans, who live very pure, and act as Gurus and Purohits for pure castes; but, so far as I could learn, have no learning; nor have I been able to hear any thing of their history. They have no connection with the Srotriyas of Bengal, but are considered as much higher than the military and agricultural tribes of Magahi Brahmans.

In the eastern corner of the district are about 40 families of Daivagnas, who are hereditary astronomers, and are considered in rank as next to the Brahmans. In the other parts of the district the sacred order has reserved to itself this branch of science.

Next in rank to the astrologers are between five and six hundred Bards of the Hindu religion, who are called Brahma Bhat. Most of them have small endowments, and they all have some land, that they rent from Zemindars, or hold from Government.

They are all employed at funerals and marriages; or, if they are very poor, are open beggars on all public occasions. In common, men of reputation get from one

to five rupees, but great persons often give 20 rupees. Bhats of inferior abilities get from one to 15 anas. If not paid according to their expectation, they are apt to be very abusive ; but of late people of rank have begun to resent the liberties which the bards were wont to take.

Notwithstanding the military tribe has been twice at least expelled from this country, there are about 80 families scattered through the district, who call themselves Kshatris ; but there is great reason to think, that these are in reality Khatri from the west of India. One of them, of the highest importance I know, is alleged to be so by the Brahman of Munger whom I have consulted.

The Rajputs in this district are exactly on the same footing as in Puraniya ; that is, in the parts which belonged to the province of Bengal, they are considered as inferior to the scribes, physicians, and merchants ; but in Behar, they are considered as next in rank to the Bards, and are allowed to be Kshatriyas or members of the pure military tribe. In this district are between five and six thousand families. Some of them hold the plough with their own hand ; but these are disgraced, and the others will not intermarry with their families. There is besides a tribe of Rajputs called Baksariya from Baksar (Buxar R.), of whom about 500 families have settled in this district. Wherever any considerable number of these Baksariyas live in one place, it is called Katgar. They are considered as peculiarly warlike, and bold, and plough with their own hand ; but, owing to their violence, their purity is not disputed. The customs of the Rajputs here are the same as in Puraniya.

There are many other pretenders to a descent from the pure military tribe, but I shall mention them, not according to their assumed rank, but according to that which is assigned to them by Brahmans who are living beyond the reach of their influence.

Rajpats are said to be different from the Rajputs, and of lower rank, but as they are settled in the Ben-galese part of the district, where there are five or six score families, I suspect that the supposed difference arises merely from the imperfect pronunciation of the

Bengalese, and from the different rank which they attribute to this caste.

The Rumzani prostitutes pretend to be Rajputs. They have adopted Nanak as their spiritual guide, and Maithila Brahmans perform their ceremonies. The Desi Rajputs, that is to say, the bastards of Rajputs, give their girls in marriage to the sons, whom the prostitutes may have. These wives are expected to be chaste, but their daughters become prostitutes. There are only three or four houses.

The Kheloni prostitutes pretend to be Raitar Rajputs. The Dasnami Sannyasis are their Gurus, and Maithila Brahmans perform their ceremonies. They may amount to fourteen of fifteen families.

The Kshetauris pretend to be of the military rank, and having been long in possession of a great part of the district, their claim is so far in general admitted, that in many parts they are placed next in rank to the Rajputs. In various parts of my account of the topography, I have mentioned the remains, which their chiefs have left. In the western end of the district the Kshetauris have been in a great measure exterminated; but there still remain, in the middle parts chiefly, above 3000 families, and there are still in the division of Bangka four persons, who assume the dignity of Raja, and take their titles from Manihari, Hangrwe, Barkop and Par-sanda. An account of their genealogy and condition will be afterwards given. The Kshetauris pretend, that, when Parasuram destroyed the military tribe of India, two of them fled to Viswakarma the god of artists for protection. Parasuram, coming up, was desirous of killing them, but Viswakarma said, these are not Kshatris (fencibles), but Kshetauris, (farmers), on which Parasuram demanded proof by their handling the plough, which in order to save their lives these degenerate persons consented to do. Their descendants have ever since been called Kshetauris, and are considered as somewhat degraded. The tribe, after this, resided for many ages in the vicinity of Dilli but, on the Muhammedan conquest of that city, they retired to Chhota Nagpur and Kharakpur, both of which, for some time, almost entirely belonged to them. No such tribe I am told remains

near Dilli, but the Kshetauri, Koeri and Dhanggar are still the principal inhabitants of Chhota Nagpur, where, I am informed, the two latter, and I suspect, the former do not speak the Hindi language, and the Dhanggar are still impure, and perhaps infidels (Mlechchhas). Another tradition concerning the Kshetauris is, that they were originally of the low tribe of fishermen called Chandals, and were raised to importance by one of them, who was a favourite of Ram. I have little doubt, that in fact, whether infidel mountaineers or vile fishermen, they were one of the tribes raised to military rank by Raja Ripung-jay, and that on their becoming followers of the Brahmins, these priests invented a Pauranik legend. They have now entirely adopted the manners of the Rajputs, and as many, as can afford, will not labour their fields with their own hands ; but those, who hold the plough, are not disgraced. Their Gurus are partly Maithila, and Rarhi Brahmins, partly Dasnami Sannyasis. The Brahmins of both kinds perform their ceremonies. The affairs of caste are settled in assemblies of respectable people, nor have they any hereditary chiefs.

Of the medical tribe of Bengal (Baidyas) there are only between twenty and thirty families, all settled in the parts of the district that belonged to the province of Bengal ; where they are allowed to be higher than the scribes.

In Behar the pen-men (Kayeth or Kayastha) are placed next to the Kshetauris, and by the Brahmins are considered as bastards ; to whom the rank of Sudras has been given ; and in general they do not presume to be angry at this decision, which in Bengal would be highly offensive. Some of them however pretend, that they did not proceed from the feet of Brahma, like Sudras ; but that three of them were made from the dust, with which, during the fatigues of creation, the whole person (Kaya) of the God was covered. One of these men of dust, named Chitra Sen, was writer to Ram or Bacchus, and from him are descended all the scribes on earth. One of the remaining two was given to the judge of the infernal regions, and the other to the chief of serpents. Their descendants continue in the little known places belonging to these mighty chiefs, where we may safely

allow them to remain. The descendants of Chitra Sen in this district amount to between three and four thousand families, forming various tribes, about the genealogy of which no two persons agree.

About 1500 houses are of Bengalese extraction, mostly of Uttar Rarhi and spread over most parts of the district. Here they are mostly of the Saktisect.

The Ambashthas amount to above 1000 families, and there are a few of the Sribastav. The latter are mostly of the sect of Vishnu. The former are mostly of the sect of Sakti. There are almost 100 houses of the Karan tribe, and here these are considered as having come from the West. These west country scribes are open and avowed drinkers.

The scribes of Mithila amount to about three or four hundred houses, and like the Bengalese drink only in private.

There are five families of Kayeths, who call themselves Etanak, and from twenty to thirty houses of Bhattanagar, both names said to be derived from the original residence of these tribes.

Of the Karkaris mentioned in Puraniya there are forty or fifty families.

Among the Kayeths are about 100 families called Krishnapakshiyas or bastards, having been descended from Kayeths by slave women, chiefly of the Dhanuk caste.

I now proceed to mention those, who are by all admitted to be pure Sudras, and who are not ashamed of the title.

All that I have said respecting the Baniyas of Puranaiya seems to be applicable to those of this district. Of those which adhere entirely to trade there are said to be as follows.

Of the Agarwalahs are only about 20 families; of the Agraharis about 30 houses, of the Puri Agarwalehs five families.

The Vaisya Baniyas here amount to about 1300 or 1400 houses. A few of them here have Ramanandis as spiritual guides.

The Swarna Baniks of Bengal amount only to about 30 houses, and have been degraded. They all reside in the part of the district that belongs to Bengal.

The Gandha Baniks of Bengal amount to almost 300 families. In Bengal Rarhi Brahmans perform their ceremonies, and they are mostly under the guidance of the Goswamis of Bengal; but in Behar they follow the Dasnamis, Sannyasis; and the Maithila Brahmans perform their ceremonies. About 30 families are called Khottha Gandhabaniks, as having been naturalized to the harsh dialect of the West. They follow the last mentioned sets of priests.

There are about 95 families of Barandra Baniks, mostly at Kahalgang and Rajmahal, and also between eighty and ninety houses of Banggadesi Baniyas mostly in the wilder parts of the district. As in Puraniya, their spiritual guides are Dasnami Sannyasis, and Maithila Brahmans perform their ceremonies. Of the Barnabars about 150 families have settled, mostly in the division of Mallepur. Here they are mostly under the guidance of the Nanaks and Dasnami Sannyasis. A very few only follow the Radhaballabhi Vaisnavs. Their ceremonies are performed by the Brahmans of Gaur. This circumstance induces me to doubt of their being a tribe of Mithila, as was reported in Puraniya.

Of the Nuniya tribe are about 35 families, and of the Kambal—Baniyas are about 75 families. Here also they are considered as low, and even impure. Their spiritual guides are Dasnami Sannyasis, and their ceremonies are performed by degraded Maithila Brahmans. The Kamalkas are chiefly settled in the wilder parts.

Of the Kasarani-Baniyas are said to be about 150 families, many of them at Munger. They speak the dialect of Bhojpur, which agrees with what was stated in the Puraniya district. In addition to these must be added 20 families called Elahabad Kasaranis, or, as is vulgarly pronounced, Elabasi Kasaranis. Here their Gurus are the Dasnami Sannyasis, and the Maithila Brahmans perform their ceremonies. They are pure.

Of the Rastokis are only about 20 houses. Their instructors are Ramayits and Dasnamis, and the Maithila Brahmans perform their ceremonies without disgrace.

About 80 families of the Ayodhyavasi-Baniyas have settled in the division of Gogri. They are chiefly under the guidance of the Dasnami Sannyasis, and the Maithila Brahmans perform their ceremonies.

About 180 families of Baniyas called Joyanpuri, from the name of their original abode in the west of India, have settled, mostly in the Kotwali and in Bangka. Like the Nuniyas they hang on the borders of impurity, and their widows become concubines. They are chiefly under the guidance of Dasnami Sannyasis, and their ceremonies are conducted by the Brahmans of Mithila.

There are, chiefly in the Kotwali, above 300 families of Kasodhan-Baniyas, who, like the former, are petty traders. Some people say that they originally came from Kasmir, a name which they invoke when they suffer any injury. The Dasnami Sannyasis, Nanaks, Ramanandis, and Radhaballabis are their spiritual guides, and Kanoj Brahmans perform most of their ceremonies. They are divided into two classes, one of which is purer than the other, as its widows do not become concubines, while the rule of the other admits of this indulgence.

Still another class of Baniyas is composed of the Vishnuwar, of whom there are above 20 families in Rajmahal. The Maithila Brahmans perform their ceremonies, and they are guided by the Dasnami Sannyasis. Their widows frequently become concubines, so that they border on impurity. Their name is probably a national distinction, as several other tribes are called Vishnuwar, but I have not learned where any place of the name is to be found.

Of the Maghaiya-Baniyas 60 families are settled in the part of the district belonging to Mithila ; none are in the part that belonged to Magadha, on which account I conclude that they are not a tribe of Magadha, but are so called in Mithila from having been settled in Magadha before they crossed the Ganges.

Finally, of the Kath-Baniyas there are between three and four score houses, chiefly settled in Gogri. They are divided among the Dasnamis, Nanak and Ramanandis. The Maithila and Kanoj Brahmans perform their ceremonies. They are quite pure, and derive their name from the article (Catechu) in which they were chiefly wont to deal.

Following the same plan that I did in Puraniya, although in Behar there are several tribes of cultivators reckoned higher than any artists, I next mention the

Sangkhabaniks of Bengal, of whom there are only 16 families in the part of the district that belonged to the province of Bengal. In the part belonging to Behar there is no analogous profession.

The coppersmiths of Bengal called Kangsabanik amount in this district to only 14 families all in Bengal.

The coppersmiths of Behar, and other western regions, are of two kinds. The Thatheras amount to about 500 families, scattered almost everywhere in the part that belongs to Behar, where they are considered as a pure caste, but they keep concubines. They live entirely by working in copper, brass, and bell-metal. They are under the guidance of the Dasnami Sannyasis, and Maithila Brahmans perform their ceremonies, but they are considered as a tribe of Magadha. The coppersmiths called Kasera amount to above 150 families, chiefly settled in the Kotwali. They are of the same rank with the others, and employ the same priests ; but they do not intermarry with the Thatheras, for which I can learn no reason. The Thatheras work in gold and pewter, as well as copper.

The Mali or Malakars, who make garlands, amount in all to above 500 families. The Bengalese part of them, who are reckoned equal in rank to the Baniyas, amount to about 170 houses, mostly settled in Rajmahal, and are called Rarhi Malis, from the part of Bengal to which they belong. The remainder speak the Hindi language, and are considered as equal only in rank to Barbers, who are here rather low. About 50 houses call themselves Kanoj-mali, 35 houses are called Tirahuti-malis, and above 200 are called Magahis, all national distinctions. I heard of 30 houses, at the capital, that called themselves Desi-malis, or native garland makers. They ought on this account to be Magahis, but the two classes do not intermarry. The Brahmans allege, and I believe accurately, that those tribes which call themselves Desi or native are usually of spurious birth. Some few of the Bengalese have received the Dasnami Sannyasis as guides, but by far the greater part adhere to the Goswamis of Bengal, and Rarhi Brahmans perform their ceremonies. The western tribes mostly follow the Dasnamis, but a few follow Nanak and the Ram-anandis. The Maithila or Kanoj Brahmans perform their

ceremonies. Some of the Malis here plough with their own hand.

The Potmakers of Bengal amount to about 160 or 170 families, all residing in their own country, where they observe its customs under the guidance of the Goswamis, and have Rarhi Brahmans to perform their ceremonies. Like other pure tribes of that country they abstain from concubines. Many of them plough with their own hand. Of the western Hindu potters, above 300 families are from Kanoj, above 100 families are from Tirahut, about 1700 families are natives of Magadha, about 60 are from Yasoyar, a country repeatedly mentioned in my account of Puraniya. All these follow chiefly the Dasnami Sannyasis, and most of them have their ceremonies performed by the Brahmans of Mithila, but a few prefer those of Kanoj. They keep concubines, and are reckoned inferior in rank to Coppersmiths. Many of them hold the plough with their own hand.

The proper Weavers of Bengal are allowed to be pure, even in the parts of Behar where they have settled, although all the western tribes of Weavers are very impure, and shall be afterwards mentioned. But in Behar they are considered as only equal in rank to the Potters, although their widows never become concubines. The Weavers of Kanoj are here reckoned impure, although in Puraniya they have been elevated from that state. Those who are pure are reckoned of the following kinds. Of Gaur about 70 houses all settled in the territory of Gaur. The Aswiniyas amount to above 150 houses settled mostly near Bhagalpur. There are between 70 and 80 families of pure weavers who call themselves Tantrabay, which is merely a general name in which the others may be included. The whole have Goswamis as their spiritual guides, and Rarhi Brahmans perform their ceremonies.

The Blacksmiths in Behar are the highest rank of artificers, and the same individuals act also as carpenters. Those of Kanoj amount to about 140 families, those of Mithila to 15, and those of Magadha to 1750. These are all of western tribes. Those of Rarh in Bengal amount to about 170 houses, all in their own country. They follow its usual customs and enjoy the exclusive possession of their art, but do not work in wood. Their

guides in religion depend on the Goswamis, and Rarhi Brahmans perform their ceremonies. The western tribes follow chiefly the Dasnami Sannyasis, but a few have put themselves in the flock of Nanak. The Maithila Brahmans perform the ceremonies of almost the whole, but a few employ the sacred tribe of Kanoj. They keep concubines, who are rejected by the blacksmiths of Bengal.

Of the Carpenters of Bengal(Sutars) who are impure, there are in this district between 120 and 130 houses.

The Goldsmiths of the west are a pure tribe of artificers, while in Bengal these tradesmen are impure. Of the whole there may be about 1000 families of different kinds. The Kanoj, Maghaiya, Ayodhyavasi, Tirahuti, and Khatri, seem to belong to the west and to be pure ; amounting to between 800 and 900 families, while the Bengalese impure tribe amounting to between one and two hundred families call themselves merely Sonar or goldsmiths, in order to confound themselves with their more pure brethren of the west.

Of the Baruis or cultivators of betel leaf there are on the whole between 1300 and 1400 families. They are everywhere considered as a pure caste, and in Behar rank between the potters and barbers. There their spiritual guides are chiefly the Dasnami Sannyasis, with a few Nanaks, and their ceremonies are performed by Maithila Brahmans. They admit of concubines. Those of Tirahut are about forty houses, of Kanoj about 25, of Magadha from 130 to 140, of Chaurasi above 700 houses, and of Yasoyar from 120 to 130 houses. In the central parts of the district a division takes place among the Baruis of Behar into Unisima and Vishnayi, of which terms I could procure no rational explanation. The Unisima amount to between 50 and 60 families, and the Vishnayi to between 80 and 90. The Bengalese cultivators of betel leaf are among the nine pure tribes of artists, and their widows do not become concubines. There are about 180 families, originally from the province called Rarh, and almost the whole continue in their original country. Their Gurus are the Goswamis, and Rarhi Brahmans perform their ceremonies.

The persons who retail betel in Behar and Bengal are called Tambuli, and amount to about 180 families.

They are nearly of the same rank with the cultivators, and in Behar have the same priests whom these employ. The Tambulis never cultivate ; but many of the Baruis not only cultivate, but retail the leaf.

The Mayras of Bengal are admitted to be of the same rank with the nine tribes of pure artificers ; but among the western nations the analogous profession of Halwais is placed above the grocers (Gandhabaniks). Between 20 and 30 families of the Mayras of Bengal have settled in the part of the district which belongs to Behar, while none are said to remain in the portion that belonged to Bengal ; but there are ten houses of the Muraris mentioned in Puraniya, some of whom reside in that portion. Between 1700 and 1800 families of the western confectioners (Halwais) are scattered through this district. Above 1350 of them are called Ganapatiya, Madhya-desi, as belonging to the central kingdom of the earth, and as being descendants of a certain Ganesa mentioned in my account of Puraniya. About 90 houses are Bhojpuriya Madhyadesi, as having come from the town of Bhojpur in the central kingdom. About 150 houses are said to be of Magadha, although Bhojpur is considered as having been a part of Magadha. About 100 houses are of Kanoj, simply so called ; about 10 houses are called Bhojpuriya Kanoj, and 16 houses are called Banarasi Kanoj ; as previous to their coming here they had settled at Bhojpur and Banaras, after having left Kanyakubja. Twenty-four houses are said to have come from Lakhnau or Lakshmanpur. About 25 houses have come from Purba, a country of which I know nothing. The Maithilas and Magadha Srotriya Brahmans perform their ceremonies. They are mostly divided between the Dasnami Sannyasis and Nanak ; but some of them have lately been converted to the doctrines of Sivanarayan. They keep concubines.

The Kandu mentioned in my account of Puraniya amount in this district to 1800 or 1900 houses. By far the greatest part are cultivators, but in many places they build houses for hire. A few only parch grain. They are mostly settled in the western parts of the district, especially on the north side of the river. They are mostly under the spiritual guidance of the Dasnami

Sannyasis but some follow Nanak, and a few the Kavirpanthi. The Maithila Brahmans perform their ceremonies, 260 or 270 families are called Korach-Kandus, of which term I heard no explanation. Above 1500 houses are Maghaiyas ; two houses are said to have come from Kanoj, and 25 belong to Tirahut, and have settled in the division of Kodwar. In all probability they are a tribe of Magadha, as I have before stated in my account of Puraniya ; but the 25 houses above mentioned having returned to Magadha, after having for some time resided in Tirahut, have been considered as natives of that country.

The Tilos of Bengal amount in all to between 200 and 250 families. They are divided into Ekadas and Madhya-desi, which last have longest settled in this district, but are not so numerous as the Ekadas. The Gurus of both are partly the Dasnamis of the west and partly Goswamis of Bengal, but most of the Madhyadesis follow the former, and most of the Ekadas are under the guidance of the latter. Rarhi and Maithila Brahmans perform their ceremonies. They abstain from concubines.

In the western parts of the district the Goyalas or Cowherds are considered the Sudras next in rank to the Baniyas. Their employments are as in Puraniya. Of the Majroti are between nine and ten thousand families, of the Krishnat-Gop about 2000 families, of the Ghoshin-Gop between 1400 and 1500, besides a few families called Ghoshin-Kanojiya-Goyalas, who are probably the same with the Kanojiyas of Puraniya. Of the Goyariya-Gop between 1100 and 1200 families have settled here; the Maghaiya Goyalas amount to above 2000 families. The Jayit-Gop from the vicinity of Bharathpur amount to about 100 families, and pretend to be of the Kshatriya tribe; the Ahiri-Gop amount to 150 families settled in the division of Kalikapur, but seem to be one of the original tribes of Brindaban. The above are all tribes from the western provinces, are mostly under the guidance of the Dasnami Sannyasis, but some follow Nanak ; a few are of the Kavirpanthi, and still fewer adhere to the Goswamis of Bengal. Their ceremonies are performed by the Maithila Brahmans. The following are Bengalese tribes.

Of the Sad-Gop are not quite 200 families and of the Pallab-Gop between 400 and 500 families. Both are under the authority of the Goswamis ; the Sad-Gop have obtained pure Brahmans to perform their ceremonies, but the priests of the Pallab are degraded.

✓ The most numerous class of Hindu cultivators in the district is of the tribe called Koeri, almost entirely confined to the part which belonged to Behar, on both sides of the Ganges. They are pure Sudras, and rank there above all artificers ; but their widows may become concubines. Their ceremonies are performed by the Maithila Brahmans. Most here are under the guidance of Dasnami Sannyasis ; some are under Nanak and the Ramanandis ; a few follow the Kavirpanthi. On the whole there may be 40,000 families. They are of many kinds, Maghaiyas, Chiramait, Bonaphar, Kanoj, Dangbe, and Tirahutiyas. About one half are of the first class, but many of them have settled in the part of the district that belongs to Mithila. Of the remainder almost two-thirds are Chiramait, and one-third Bonaphar, of which terms I obtained no explanation. The numbers of the others are trifling.

In this district the class of cultivators called Ganggot is considered as of a rank equal to the Koeri. There are between 4000 and 5000 families, all settled near the Ganges, on both its banks, between Munger and Bhagalpur. I have nothing to add to what I have said concerning them in the account of Puraniya.

The Kurmi, mentioned in my account of Puraniya, are the cultivators next in rank to the Koeri and Ganggot ; but several castes of artificers intervene, and the Kurmis are considered as equal only to the cultivators and retailers of betle. There may be in all between 14000 and 15000, families, mostly settled, in the western parts, south from the Ganges, but a good many are also to be found in the division of Fayezullahgunj. They are of several different kinds, Sangsawar, Kurmi without any additional appellation, Chandani, Ayodhiya, and Yasoyar. More than a half are of the first kind ; of the remainder one half is of the second kind, and about a quarter of each of the third and fourth kinds. Of the last there are few. Their priests and customs are the same as in Puraniya.

Among the cultivators of this district the Dhanuks are reckoned the next in rank. They are more scattered through the district than the Ganggots, but do not exceed eight or nine thousand families. They are divided into Silhatiya Maghaiya, Yasoyar, Tirahuti, and Kanojiya, all local distinctions. A great many of them are slaves employed in agriculture, and most of the unfortunate persons in this district reduced to this state belong to this tribe. In some parts it was alleged that if a person procured a slave of any caste, the Dhanuks would receive the unfortunate man into their society ; but in other parts the slaves pretend to be as nice as their masters. They are chiefly under the Dasnami Sannyasis, and Maithila Brahmans or Magahi Srotriyas perform their ceremonies.

Stonecutters and Barbers, in the Magadha part of this district, follow nearly in the same rank. The former, called Gongr or Sungturas, amount to only between 60 and 70 families. They are reckoned to be originally from Bhojpur, and call themselves Rajputs, but Brahmans in some degree degraded perform their ceremonies. They belong to the sect of Nanak.

The Barbers here are much on the same footing as in Puraniya. In Behar some of them, who confine their operations to shaving, are considered as tolerably pure ; but a Brahman rejects the water drawn by those who are surgeon-barbers, and extract blood with any implement except a razor. Had the ease of the patient been consulted, the reverse should have taken place. In Bengal again the Barbers are very pure. In the part of Bengal that belongs to this district there are Barbers (Napits) of Gaur about 360 or 370 families, and o Rarh between 70 and 80 houses. Both have Rarhi or Gaur Brahmans to perform their ceremonies, and they are under the guidance of the Goswamis. In Rajmahal about 100 families from the west have settled ; and in the western parts of the district are somewhat about 2000 families, who are undisturbed by the Barbers of Bengal. They are chiefly under the guidance of the Dasnami Sannyasis, but a few are followers of Nanak. Their ceremonies are performed by Maithila Brahmans. A few of the Barbers are of the Kanoj nation ; most of

them are Ayodhiya ; a good many are Maghaiyas and Tirahutiyas.

Next to these follow a class of many castes, most of which fish and cultivate the land, but some follow other professions. They are not far from being impure, and their respective ranks are by no means ascertained. The Maithila Brahmins do not consider themselves as entirely disgraced by performing their ceremonies, but many Brahmins of Kanj and Bengal scorn those who so far demean themselves.

For an account of the Kewats and Kaibartas I refer in general to the papers respecting Puraniya. In the part of Behar that is in this district there may be from 280 to 300 families of Kewat, all reckoned tolerably pure, and who live by fishing, managing boats, and cultivation. They are not sub-divided by any distinctions, of which I heard. In the same parts are about 200 families of Kaibartas, who live entirely by agriculture, and have settled entirely in the division of Lokmanpur, where they are called Khantas or diggers. They are allowed to be pure, but the Brahmins who perform their ceremonies are degraded. In the Bengalese parts of the district are between three and four thousand families of Kaibartas, who are all farmers except a very few accountants and writers. Their ceremonies are there performed by Brahmins, who are peculiar to themselves, but are not reduced to the low rank of Varnas, nor are they called Vyasoktas as in many parts of Bengal. They are called Fatit or excluded. They follow the doctrines of the Goswanis of Bengal, chiefly as taught by the Janggallolas. I shall afterwards return to the Kewats of Bengal, who are impure.

The Amat, mentioned in Puraniya, amount in this district only to between 30 and 40 families, settled in the division of Fayezullahganj. Here they are all free.

The Nagar, mentioned in my account of Puraniya, amount to between 1900 and 2000 families, mostly settled in the district of Lokmanpur, but some of them also in the Bengalese portion of this district, near where the greatest part of those in Puraniya are to be found. Their religious instructors are the same as in Puraniya, which together with the numbers found in the western

parts of this district confirms the opinion, which I have there mentioned, of their having come from the west.

The Gongrhi, mentioned in my account of Puraniya, are pretty generally diffused through this district, but are most numerous in Lokmanpur and Rajmahal, that is in Gaur and Mithila. Many of them are cultivators, but most of them are fishers and boatmen. The divisions here are—Kurin thirteen or fourteen hundred houses, Banpar about 400 houses, Kanojiyas from 100 to 150 houses, Tirahutis about 60 houses, settled in Bangka and Tarapur; and Maghaiyas about the same number settled chiefly in Mungger. The Dasnami Sannyasis are their Gurus, and the Maithila Brahmans perform their ceremonies.

The Rawani Maharas, mentioned in my account of Puraniya, amount to between 1600 and 1700 families, of whom a few in Mungger call themselves Maghaiyas, because Mungger is not allowed to be in Magadha, and this tribe seems aboriginal of that country. It is a general tradition, not only among themselves, but with all other tribes, that the Rawanis are of the same family with Jarasandha, sovereign of India before the government of the Pandu family. If so, they have the best claim to nobility of any Hindu tribe, and may have been reduced to their present state by Mahananda, who as I have before mentioned in the fifth century before the birth of Christ (allowing Major Wilford's chronology to be exact) destroyed the nobles of Magadha, and elevated base tribes to the military rank. It is perhaps on this account that in Magadha they are admitted to be a pure tribe, while in Mithila they are considered as low, and in Bengal are held altogether vile, because they have not adopted the modern purity of manners. The Dasnami Sannyasis are their Gurus, and the Maithila Brahmans perform their ceremonies.

The Gangreri, mentioned in my account of Puraniya, stated that they originally came from the vicinity of Mungger. If that has really been the case, they are now very scarce in their original country, as in the whole district there are only 160 or 170 families, very much scattered through the western parts, on both sides of the Ganges. In Magadha their ceremonies are performed

by Maithila Brahmans, who are not degraded, which perhaps shows that they are an original tribe of that country, as the emigrants to Mithila are held in less estimation. Their instructors are Dasnami Sannyasis.

The Tiwar mentioned in Puraniya among the impure tribes, are in Magadha considered as pure, and about 150 houses are settled in Mungger. Dasnami Sannyasis give these instruction, and their ceremonies are performed by Maithila Brahmans, who are not degraded. About an equal number are to be found in the part of Gaur contained in this district, but there they are impure. Varna Brahmans alone will perform their ceremonies, and their Gurus are the Vaishnavs of Bengal. In that vicinity, however, are 1200 or 1300 families who call themselves Rajbangsi Tiwars, on account of their kindred with a prince who governed that part of the country. They have there priests of a similar rank, and wallow in the same impurity ; but about 300 families of these Rajbangsis have emigrated to Mithila and Magadha, where like other Tiwars they are admitted to be pure. The Tiwars are fishers, boatmen and cultivators. The Rajbangsis have divided into two kinds, Bananjugiyas, who are all cultivators, and live tolerably pure ; and Govariyas who fish, cultivate, eat pork, and drink strong liquor.

The tribe of fishermen called Chabi, mentioned as impure in Puraniya, are found in this district. About 100 families are settled in the part of Mithila that is situated in it, and the Brahmans of that country, who perform their ceremonies, are not degraded, while the Dasnami Sannyasis give them instruction ; but 30 families settled in Gaur have procured only Varna Brahmans, and they are instructed by Vaishnavs.

The Muriyaris, in Puraniya reckoned as an impure tribe, are not here in that condition, and even in the part of Mithila belonging to this district, where by far the greatest part of them have settled, the Brahmans of that country, who perform their ceremonies, are far from being disgraced. They are under the guidance of the Dasnami Sannyasis. In the whole district are between 400 and 500 families, who live by fishing, cultivation, and the management of boats.

The Suraiyas, mentioned in my account of Puraniya has an impure tribe of fishermen, amount in this district to between 300 and 400 houses, mostly settled in the part of Mithila that it contains. The Brahmans, who perform their ceremonies, are not degraded, and Dasnamis are their spiritual guides. Many of them are cultivators.

In this district some petty dealers, who retail hot seasoning, are considered as a separate caste, and are called Khattiks. There are about 180 families, mostly settled in Rajmahal and the central parts of the district. Although petty traders are usually considered as impure, the Maithila Brahmans, who perform their ceremonies, are not degraded, and the Dasnamis give them spiritual instruction.

The Kamanis follow the same profession, and enjoy a similar rank, but do not intermarry. They are only three families settled in Munger, and they know nothing of their history. They go to Gaya for wives.

The Banats are a tribe of cultivators, mentioned in Puraniya among the impure. They are most numerous in the parts of the district comprehended in Mithila; but seem to have extended south through the middle parts of the district. In the whole are about 300 families. Here the Maithila Brahmans who perform their ceremonies, are not degraded. Most are guided by the Dasnamis but some by Ramanandis.

The Ramaiyas are a tribe of cultivators who, so far as I can learn, are confined to the vicinity of the Rajmahal hills, on both east and west sides, partly in Bengal, partly in Behar, but most of them belong to the latter. In all there may be from 2000 to 2200 families. Their instructors are the Dasnami Sannyasis. Kanoj Brahmans perform their ceremonies. Some pretend that these are degraded, but this others deny. At any rate they are on the verge of impurity. It seems generally admitted that they are a tribe from the west of India.

Banawars or woodmen belong to a class of cultivators, but they also cut timber and bamboos, and collect drugs. There are only about 100 families in the wilder parts of Behar. They are chiefly instructed by the Ramayits, but some follow the Dasnamis. The Maithila Brahmans, who perform their ceremonies, are not disgraced.

The Parighas form a pretty numerous tribe of cultivators in the hilly parts of the district, especially in Bangka. They also rear Tasar, collect the resin of the *Shorea robusta*, and act as armed servants. There may be in all 3000 families, most of which are instructed by the Dasnamis, but some by the Ramayits. The Maithila Brahmans perform their ceremonies without disgrace. They seem to be aborigines, and to have been reared from impurity by Ripungjay.

The Kantwars fish and cultivate the earth, and are almost entirely settled in Lakardewani towards the frontier of Virbhum, of which parts they probably are an aboriginal tribe, but their number is trifling, amounting to only 170 or 180 houses. Their instructors in religion are the Dasnamis, and the Maithila Brahmans perform their ceremonies without total disgrace. Many of them are employed domestic servants.

The Markandiyas have been mentioned in my account of Puraniya as an impure tribe. In both districts their manners are nearly the same, resembling entirely those of the Kantwars ; but here they are reckoned pure, and the Maithila Brahmans, who perform their ceremonies, are not degraded. In spirituals they are guided by the Dasnamis. They are mostly settled in the part of Maithila that belongs to this district, where there may be between 700 and 800 families.

The Torhas mentioned in Puraniya as an impure tribe of fishermen, in Magadha are considered as pure, and frequently carry the palanquin. In all there may be somewhat above 350 families, mostly settled in Rajmahal, where their ceremonies are performed by Maithila Brahmans not degraded, and their spiritual guides are the Dasnamis.

The Kharwar, mentioned in Puraniya among the impure tribes, who cultivate fish, and carry the palanquin, are very numerous below Bhagalpur, on both sides of the river, where they may amount to about 3000 families, mostly employed in agriculture. Here they are considered as pure, and the Maithila Brahmans, who perform their ceremonies, are not disgraced. They are followers of the Dasnamis. They inform me that in their original country they have a language peculiar to themselves, but here they have adopted the Hindi dialect.

In the part of the district situated in Mithila are about 90 families, who fish, cultivate, man boats, and are called Chotaha. Their ceremonies are performed by Brahmans, who are not disgraced, and their spiritual guides are Dasnamis.

The Laheris, mentioned in Puraniya, in this district amount to about 200 houses, mostly in the vicinity of the capital. They are here admitted to be pure, are under the guidance of the Dasnamis, and Maithila Brahmans perform their ceremonies. They live entirely by working in lac. Many have become Muhammedans.

The Patwars, who adhere to the Hindu religion, are only between 30 and 40 houses, and are here admitted to be pure.

These are all the tribes that even in Magadha are admitted to be pure. The following are impure.

The Bhar, mentioned in my account of Puraniya, in this district are allowed to be impure, although the kindred tribe of Rawanis has been elevated to pure birth. The reason seems to be that none of the Bhar have settled in Magadha. They are confined to the part of the district included in Gaur, where there are less than 20 families. Their priests and occupations are the same as in Puraniya.

In the territory of Gaur are 115 or 120 houses of the impure tribe of cultivators named Pungra, and mentioned also in my account of Puraniya. Their customs in both districts are similar.

In the same vicinity the Chasat, mentioned also in my account of Puraniya form a very numerous class of cultivators, amounting to 1500 or 1600 families. Their manners in both districts are the same. In the Bengalese part of this district they are reckoned a branch of washermen, who have abandoned their impure profession.

The Kungjras or Khattiks, who are still pagans, have been mentioned in Puraniya. About 30 families are settled in Gaur.

There is only one house of Kawalis, settled in the same vicinity.

Among the impure tribes of Magadha, the cultivators and fishermen hold a superior rank to the artists and traders, contrary to what happens in Puraniya. I

therefore do not follow the same order that I did in that district.

The Malos of the west usually call themselves Jaluya Kaibartas, which may be readily understood from what I have said in my account of Puraniya.

In this district are about 170 or 180 houses, and the greatest numbers are in Suryagarha and Pratapgunj, the two extremities of the district. Those of the latter follow the Vaishnavs, and have Brahmans called Patit. They are therefore probably in reality Kewats, who have assumed the name of Kaibartas without relinquishing their impurity. Those in the west follow the Dasnamis, and low Maithila Brahmans perform their ceremonies.

The Kewats of Bengal, who are impure, amount to about 200 families, all settled in Gaur.

The Bindus, described in Puraniya, are here reckoned a tribe of Beldars, and amount to between 500, and 600 houses, scattered through the district. They fish, dig, and plough ; some of them are hunters, and kill or catch deer for sale ; others are employed in the woods to collect drugs.

The other Beldars are Khodoyas, amounting to about 450 houses, Nuniyas near the same number, and Sambal amounting to about 130 houses. The Dasnamis are the spiritual guides of the whole, and they have degraded Brahmans peculiar to themselves, who perform their ceremonies.

Of the fishermen called Bagdi, and mentioned in Puraniya, are about 24 houses, instructed by Vaishnavs, and having their ceremonies performed by Varna Brahmans.

The Patani boatmen, mentioned also in Puraniya, are found here to the amount of about 24 families. Their priests are similar to those of the Bagdis.

Of the Kandal or Kandar, mentioned in the account of Puraniya, we have here only about 25 houses, settled in the part of Gaur which this district contains. Their manners are as in Puraniya

Of the Barahi Kandal, mentioned in the account of Puraniya, 50 or 60 families have settled, chiefly in Kali-kapur. Here they are under the guidance of the

Vaishnavs, and their ceremonies are performed by Varna Brahmans.

In this district the Chaings form a very numerous class. Some fish, and many more cultivate the ground, both as ploughmen and gardeners. They are mostly settled in Rajmahal and the divisions south from thence; but some are scattered towards the west, along the bank of the Ganges. In Rajmahal and towards the west they are guided by Dasnamis, and degraded Maithila Brahmans perform their ceremonies, but south from Rajmahal they have yielded to the Vaishnavs and have procured Varna Brahmans.

The Chabis mentioned in the account of Puraniya are partly settled in Mithila, partly in Gaur. Of the former are about 100 families, which follow the Dasnamis, and employ degraded Maithila Brahmans to perform their ceremonies. In Gaur are about 30 families which employ Varna Brahmans and Vaishnavs.

In the part of Mithila contained in this district are about 300 families of the Rishis, mentioned in my account of Puraniya. They are instructed by the Dasnamis, and have degraded Maithila Brahmans, who consent to perform their ceremonies.

The Chandals, mentioned in my account of Puraniya, are confined to Rajmahal, where there are 200 families. They here adhere to the Dasnamis, and have their ceremonies conducted by Varna Brahmans.

The Nat whose women balance and perform sleight of hand tricks to amuse the populace, while their men beat a drum and sing, are very thinly scattered, as may be supposed from the nature of their profession. In the whole district are only ten families. They pretend to be Rajputs, but are an impure tribe. They are guided by the Dasnamis, but their ceremonies are performed by the Kraungchadwipi Brahmans. Their history, therefore, if it could be traced, is probably very singular, and both they and their priests are probably colonists from some distant country. The reason of their calling themselves Rajputs is probably that a considerable part of the district belonged to a tribe called Nat, of which many individuals remain, among the very dregs of impurity or rather of total infidelity. To these we shall have

afterwards occasion to return. I am inclined to think that the princes of the Nat tribe, were in fact of the same kindred with the Nat who now have been reduced to earn a subsistence by amusing the people, as from the remains of their castles they seem to have been fully as much civilized as other Hindus; while the Nat-Pahariyas seem to me to be of the same race with the Northern tribe of mountaineers, and probably have never had any arts of civilized life; but they may have formed the military force of the Nat chiefs, and from that circumstance have adopted the name.

The oilmen (Telis) mentioned in the accounts of all the districts hitherto surveyed, amount in this to near 5000 houses. Many are mere traders, and a few of them hold the plough. The kinds are as follows —

The Rarhis amount to above 700 families, mostly settled in Gaur; but a few in Mungger and Suryagarha. In the former they follow the Vaishnavs, and Varna Brahmans perform their ceremonies. In the latter they are mostly under the care of the Kavirpanhi, and degraded Maithila or Kanoj Brahmans perform their ceremonies. The term Chausakhi for these Brahmans is here unknown. The Maghaiya Telis amount to above 2400 families, almost all settled in the Behar part of the district. They follow the last mentioned priests; 400 houses of these Maghaiyas have separated themselves from the others, and call themselves Munggeri Maghaiyas, although they follow exactly the same impure customs, and have a similar priesthood.

The Ariyar (Pedler) Telis amount to about 1100 houses, settled mostly in the central parts of the district. Their priests are similar to those of the Maghaiyas and Rarhis who have come to Behar, but a smaller proportion follow the Kavirpanth, and more are under the guidance of the Dasnamis. The Kanoj Telis amount to above 200 families, mostly in Mungger and Rajmahal. The Tirahuti Telis amount to about 50 families, settled chiefly in Bangka, the Maghaiyas having almost entirely expelled the native caste from the part of Mithila that is in this district. The Joyanpuri Telis settled in Mungger amount to about the same number. The Yasowars amount to about ten houses. The Desi Telis

to about 240 families. It is supposed by my assistants that they are in fact bastards, who have been excluded from all the above national tribes.

There are here about 70 families of a tribe called Gurer, who are shop-keepers, and some of them possess a little wealth. They are supposed to have originally come from Bhojpur, and have all settled in Mungger. Their spiritual guides are Dasnamis, Nanaks, and Ramanandis ; degraded Brahmans of Kanoj perform their ceremonies.

The tribe called Sungri or Sau, and mentioned in my account of Puraniya, contains in this district about 3500 families, of several kinds. The Rarhi or Gaur Sau amount to above 250 houses, all settled in Gaur or Lakardewani ; the Banggadesi Sau amount to between 40 and 50 houses ; the Kol-Sungri amount to above 1500 families ; the Yasoyar-Sungri to above 1600 families ; the Ariyar Dhankata Sungris to about 600 houses ; the Maghaiya-Sungris to above 250 families ; the Kalwar-Sungris to above 70 houses, who are the proper distillers, but some of them trade in other articles ; the Vishnuwar-Sungris amount to about 60 families ; the Mathuraseni-Sungris amount to 25 houses ; the Ayo-dhyavasi-Sungris amount to about 14 houses ; the Tirhuti-Sungris amount to six houses ; and there are in Bhagalpur two families called Banodh. All the Brahmans, who perform their ceremonies, are degraded. Their spiritual guides are mostly Dasnamis, but many follow the Kavirpanth ; some follow Nanak, and a few the Vaishnavs of Bengal.

In this district the proper distillers are called Kalwar, and are considered as a distinct caste from the Kalwar Sungris, although many of the latter distil. The Kalwars are of several kinds. There are above 500 houses, called Behat, scattered through the district ; above 280 houses of Yasoyars have settled mostly in Partapgunj ; some of them seem to have first settled at Bhojpur, as they are called Bhojpuri Yasoyars. Their manners and occupations are exactly similar to those of the Sungris, and many of both kinds affect to call themselves Baniyas.

The Pasis, who extract palm-wine, in this district amount to above 600 houses. Rautasis 350, Kamanis 116, Tasoriyas 100, Beyads 30, and Maghaiyas 30. Some of them live entirely by cultivation, and all are employed as labourers when the palms produce no juice. They are chiefly under the guidance of the Dasnami Sannyasis, and degraded Brahmans of Mithila perform their ceremonies.

The washermen in this district amount to 1200 or 1300 houses. Some of them have betaken themselves to cultivation, as the emoluments of their profession among a people so slovenly are not adequate to their support; but in order to avoid reproach none have entirely betaken themselves to the plough, unless we include the Chasat before mentioned. They are under the guidance of the Dasnamis, and degraded Brahmans of Mithila and Kanoj perform their ceremonies. A few have Varna Brahmans, and follow the Vaishnavs of Bengal. There are several kinds : Maghaiyas near 800 houses, Ayodhiya near 200 houses, Kanojiyas about 12 houses, Bhojpuris 8 houses, Tirahutis 3 houses, Rarhis 230 houses.

Of the Yogis, mentioned in the account of Puraniya, there are between 30 and 40 families, all in the Gaur part of the district. A few are weavers, the remainder are cultivators; but the number is so small that I acquired no additional information concerning this curious tribe. The Kanphatta-Yogis deny all communion with these people.

In the part of this district that belongs to Gaur, the persons who prepare lime from shells are considerd as forming a distinct caste called Chunari. In the western parts the lime used for chewing is made by the Gongrhi and Barui, and several other castes burn limestone. The Chunari caste in this district contains about 45 families. Varna Brahmans perform their ceremonies, and the Vaishnavs of Bengal are their spiritual guides.

All the Pagan Jolahas of this district have degraded Brahmans to perform their ceremonies, and all might receive instruction from the Dasnamis. Some do so; but many, especially while young, think that is unnecessary.

There are several kinds : Kanojiyas between 1600 and 1700 ; Tirahutis as many ; Maghaiyas near 500 ; Chanurs about 300 ; Palwans about 140 ; and Chapotas about 20. Perhaps a fourth part live entirely by weaving. A few are entirely cultivators, but in general the remaining ~~have~~ have a loom in each house, and the men live partly by weaving, partly by cultivation. They are also very noisy musicians, and spend a great deal of time in the exercise of the drum, by which they obtain a living.

The Dholis, mentioned in my account of Puraniya as a Tirahuti tribe of weavers and musicians, amount in this district to about 120 houses, settled mostly in the part of Gaur which is contains.

Almost the whole of the Dhuniyas, who clean cotton, have adopted the faith in Muhammed, and are often called Nudap. I have heard only of four families that continue pagans.

I should now perhaps proceed to treat of some tribes, that occupy hilly parts of the country, but as some part of them have not at all been converted to the Hindu doctrines and are considered as total infidels (Mlechchhas), while others even of the same tribes have been admitted to the rank of Hindu nobles, I shall defer a consideration of the whole until I have finished what I have to say concerning the dregs of Hindu impurity, for whom no Brahman performs ceremonies, and whose consciences it is not worth while to direct.

The Dosads are pretty numerous in this district, and are generally scattered, but in the part of Mithila which this district contains, they are very numerous, and form a considerable portion of the cultivators. In the whole district there may be 3000 families, of whom a half belong to the division of Lokmanpur. I have nothing to add to the account of their manners that I have given in treating of Puraniya. Almost the whole here call themselves Magahi Dosads, but there are a few Kurins, Kanojiyas, and Desis, the last of whom are probably bastards.

The Dhari are a tribe of watchmen, of whom 32 houses only have settled in the divisions of Kumurgunj, Munger, and Suryagarha. Their customs are nearly similar to those of the Dosads, but I have learned

nothing satisfactory concerning their history. It is usually supposed that they have come from the west.

The Musahars, another tribe of watchmen, have been mentioned in my account of Puraniya. They are fully as numerous as the Dosads, especially in the division of Tarapur. A woman of this tribe named Kama, and her husband named Hira, on account of the sanctity of their lives have been defied, and are worshipped on the north side of the Ganges.

The Bauri are of an impure tribe, carry the palanquin, and cultivate the ground. There are about 32 families on the frontier of Virbhumi. They are usually suspected of being addicted to pilfering.

The Korandiyas, who catch birds, and beg, have been mentioned in my account of Puraniya, and in this district amount to about 80 families. They chiefly live by begging, in which the females are exceedingly unfortunate, strong, idle women, and the men are very lazy stout fellows. They are sometimes employed to carry the palanquin.

The Kangjar, mentioned in Puraniya as public executioners, do not here follow that employment. They make straw or grass ropes, and brushes for weavers. Their women stain the skins of the Hindu Girls. In this district there are only 14 families.

The Kallar catch birds, bring firewood for sale, and hire themselves as day labourers. They are in this district only 25 houses.

The Dabgars, mentioned in the account of Puraniya, are in this district confined to Mungger, where there are only five families. Here they have neither Guru nor Purohit, but they are not so impure in their customs as most of the vile tribes.

All the foregoing vile castes abstain from beef. The following eat it in the state of carrion, as they are not supposed to kill the animal.

The Kural have been mentioned in Puraniya as workers in leather. In the part of this district that belongs to Bengal there are many of this tribe, but a great part of them have betaken themselves entirely to agriculture. There may be in all ten or eleven hundred families. They have no priests except those of their own tribe.

The common tanners and workers in leather, called Chamar or Mochi, amount in this district to about 2200 families. Here they are subdivided into several kinds, that do not intermarry—Dhusiyas, who amount to about a half of the whole ; Dohor, who amount to more than one-third of the remainder; Maghaiyas, not quite so numerous as the Dohor ; Gurlyas, Kanojiyas, and Joyanpuris. There are besides several who have been converted to the faith in Muhammed. The midwives in this district are mostly of this caste. They are not employed by the men in complaints of the abdomen. Many of the men are employed in agriculture.

The Basket-makers (Dom) in this district are considered as more vile than the dealers in leather, and seldom if ever work at the plough. Some work in bamboos and ratan, and sometimes in straw ; others are sweepers, and others act as public executioners and remove dead carcases ; and these differences of professions have produced a distinction of caste. The first are called Bangsphor, and these again are divided into different nations ; Magahis, 700 families, Mahauliyas, 150 families, Tirahutis, 10 houses, Rarhi, 60 or 70 houses ; Deswar, probably bastards, 150 houses. Those who act as sweepers are called Hulalkhor, and amount to about 150 houses, but there are other people of the Hari caste who follow this profession. Those who are public executioners, and remove dead carcases, are called Jullad, Mordapfurosh, Dapra, or Domra, and amount to above 200 houses. These also will sweep, but the Hulalkhors will not remove dead bodies. The women in Magadha do not receive strangers, as in Mithila

Those who are mere sweepers do not cultivate the ground. They are usually called Hari and Hulalkhor, and sometimes Mukiyaras. They amount to eight or nine hundred families.

The famine of the Bengal year 1177 has here, as well as in Puraniya, given rise to an unfortunate race of Saryuriyas, but there are only about 11 houses, the lowest of all tribes because they will eat the remnants of the food of all others.

I now proceed to give an account of the mountain tribes, and I must first observe that although I have in

some measure excluded them from the Hindus, because they in general reject the customs which the bulk of the Hindus consider as distinctive of their nation, and are by them considered as Mlechchhas, yet I must say that I believe them to be the descendants of the original inhabitants of the country, very little, if at all mixed, with foreign colonies. Their features and complexion resemble those of all the rude tribes that I have seen on the hills from the Ganges to Malabar, that is on the Vindhya mountains. Their noses are seldom arched, and are rather thick at the points, owing to their nostrils being generally circular ; but they are not so diminutive as the noses of the Tartar nations, nor flattened like those of the African Negro. Their faces are oval, and not shaped like a lozenge, as those of the Chinese are. Their lips are full, but not at all like those of the Negro ; on the contrary, their mouths in general are very well formed. Their eyes, instead of being hid in fat, and placed obliquely, like those of the Chinese, are exactly like those of Europeans. In fact, considering that their women are very hard wrought, they are far from having harsh features.

The most remarkable of these mountaineers is the tribe which occupies the northern part of the Rajmahal hills. To the map and topography I refer for an account of the territory, which they possess, and for an account of their manners I refer to a paper by Lieutenant Thomas Shaw contained in the fourth volume of the *Asiatick Researches*, to which I have very little occasion to make any additions. The orthography, which I have adopted, differs from that employed by the above mentioned intelligent officer, not from any idea, that his is incorrect ; but for the sake of uniformity. In the first visit that I made to their villages, on the hill Gadaitunggi, east from Udhwanala, I went from the bank of the Ganges in a palanquin, which I left at the foot of the hill, and in order to give no alarm ascended with only two servants, and a guide who was a mountaineer in the service of the post office. Not one of us had even a stick in his hand. As we ascended, we were joined by a young man, son of the chief of the village, who, as I passed, came from a farm on the plains, which his father rents. The young man was

intelligent, and not at all rude ; but showed no disposition to give us a cordial reception. When we came to the village, all the men remained in their houses, and most of them shut their doors. The women and children came out to look at me, but declined conversation, although the young man said, that all the women could speak the low country dialect. I went towards two or three groups ; but, as I approached, they all retired, except one young woman, who had a good deal of reason to be satisfied with her appearance. As I approached, she stood with a becoming, but modest assurance ; but she would not speak. I now determined to put the young chief's hospitality to a full trial, and sat down on a stone by his father's door, complaining of the heat, and of thirst ; but he neither offered to take me into the house, nor to give me water.

Another attempt on the hill Chaundi, west from Rajmahal, convinced me that these people do not possess the virtue of hospitality. I soon after indeed found out the means of making them assume its appearance. I had passed along a great part of their frontier, without having been able to procure any intercourse, sufficient to give me a knowledge of their manners ; and I therefore determined to give a feast, which I was told would answer the purpose. At Ganggaprasad I invited those of the neighbouring hills, and gave them a dinner and drink. At Paingti I gave another entertainment. Afterwards, so long as I continued in their neighbourhood, I was completely worried with their attentions. Flocks poured in with little presents of honey, and eager to give me information ; and, when I visited any of their villages, I found every door open. Our intercourse, however, always terminated in a solicitation for drink, a most extravagant fondness for which seems to be the greatest foible of the tribe. They are, however, good natured in their cups ; and one of them, who was brandishing a hatchet, as he was dancing amidst a staggering crowd, readily gave it up to me, and seemed sensible of the propriety of my taking it. A custom, which they observe in their dances, clearly marks their insatiable desire for liquor. The chief person goes round the men and women of the party, as they dance ; and in their turns

pours from a pitcher into the mouth of each, what he thinks a reasonable quantity. When he has gone the round, another person takes the pitcher, and helps the chief. No one helps himself to the pitcher, sensible that so long as a drop remained, he could not remove it from his lips.

They are fully as well dressed and cleanly as the neighbouring peasantry, and their women have a greater quantity of ornaments, and these more valuable. Their houses are more roomy and airy, and fully more clean. The principal ornament of their huts consists of the skulls of the tigers, deer, hogs and porcupines, which the owner has slain, and on the number of these trophies he prides himself with all the exaltation of a keen sportsman. Their chief art is the preparation of what they call Pachoi, that is, fermented grain, from which they prepare their liquor, and which differs considerably from the operation of malting. The grain, either maize or janera (*Holcus Sorghum*) is boiled, and spread out on a mat to cool. It is then mixed with the ferment of vegetables called Bakar, which I have described in my account of Ronggopur, and kept in a large earthen pot for eight or nine days. Warm water may at any time be added to this, and in a few hours it ferments, and is ready for being drunk. This liquor they call Pachotadi. Some of them can distil it, and prepare Patkatadi. In the southern parts of their hills this tribe possess many oxen and cows; but in the northern parts they have only domestic swine and goats, as mentioned by Mr. Shaw. A few of them can read and write the Nagri character.

These people call themselves Maler; but they admit that this name is also applicable to the southern tribe of mountaineers, whose manners and language are very different, and with whom they cannot eat nor intermarry, nor could I hear of any tradition concerning the two tribes having ever had similar customs; but probably their customs at no very remote time were the same, their traditions going back to no distant periods. They have, for instance, no tradition concerning the introduction of Maize, which is now their principal food; and its introduction must have been the greatest improvement on their condition that has ever taken place, and has

occasioned the addition of a new god to their worship. All other tribes they call Galer; but among these are comprehended several tribes that shall be afterwards mentioned, with whom they sometimes intermarry, many of whom retain their language, and all eat in common, and join in the repast on beef.

The Suzawul or native officer who superintends their conduct estimates the number of this tribe at 80,000 houses, but I have no doubt that this is a most gross exaggeration, and formed with a view of representing his services as more important than they were; for he attributes to himself the whole merit of having rendered them peaceable allies of Government. In fact this was chiefly effected by the terror which the military operations of Captain Brooke inspired, and a plan of temperate conciliation adopted by Captain Browne; and it seems exceedingly doubtful whether or not the kindness shown to them by Mr. Cleveland and the lavish use of public money have had any advantageous results. Were I to believe the Suzawul's account, I should rather think that the pensions have done harm. He says that whatever the chiefs receive is totally expended on liquor at Bhagalpur, and that the pensioners return from thence just as bare as when they left their hills. If such is the case, the idleness which usually accompanies such dissipation must have tended to reduce them to greater poverty than would otherwise have been the case. The payment should therefore, if possible, be made to them near home; and perhaps might be effected at Majhuya, through a native officer fixed there, as I have already proposed. It would of course be necessary that he should be liable to severe punishment if detected in fraud; and the best source of information, and means of control, would probably be found in the officer commanding the corps of hill rangers.

On a most careful inquiry I learned that the territory of this tribe is reckoned to contain 589 villages, and that though some few of these contain from 30 to 50 houses, the average cannot be taken at above 12 houses and 60 people for each, giving in all 7068 houses, and 35,340 people. In the whole of their territory I have allowed 38,000 people, the difference being on

account of the Ghatwals and their dependents residing among the hills.

In the annexed vocabulary will be found a specimen of their language. It is highly probable that it will be soon lost, and that part of them will adopt the Bengalese, and part the Hindi dialect, according as they frequent chiefly the market of Bengal or Behar. This tribe openly boasts in its impurities, and glories in eating beef and drinking beer, as if it were composed of Englishmen ; but all the other tribes have become more or less ashamed of committing such enormities, and endeavour to shun or conceal part of their impurity. This produces a great difficulty in tracing their pedigree ; for the various degree of command which in different parts the people of the same tribe have obtained over their unruly appetites has given rise to innumerable divisions, and at very little distances totally different customs prevail. These I shall now endeavour to trace.

The Nat before mentioned, are usually called Pahariya (hill) Nat, in order to distinguish them from those who amuse the people by performing tricks. I have already mentioned that in my opinion they are descended of Maler, who were taken into the service of the Nat Rajas, to whom Kahalgang, Teliyagarhi, Madhuban, and the adjacent parts of this district belonged. At Majhuya, in the centre of the hills, it was admitted by both parties that the Nat and the Maler eat together and intermarry ; but at Parsanda this last was denied. At Majhuya the Nat said that they were the same with the Beherbhungiyas. and at Parsanda they were said to be numerous not only there, but also in Manihari, Barkop and Godda ; but at the last two places I heard of none of them, because there they were probably called Beherbhungiyas, while this name is totally unknown at Parsanda, and in Godda the people have never heard of Nat. Many of the Nat men speak the Maler language, but the women in general use the Hindi. They have betaken themselves to cultivate with the plough, but many of the men are in the service of Government, as guards to prevent the incursions of the hill people. In eating and drinking they adhere to all the abominations of the Maler. Their chiefs, as those of the Maler, are

called Majhi. There may be in all about 300 families, exclusive of those called Beherbhungiyas, if these be different.

I have just now mentioned that I thought it probable that the Beherbhungiyas were the same people with the Pahariya Nat, and they seem pretty evidently to be the same with the hill Maler, for at Barkop they are called indiscriminately Beherbhungiyas, Desi-bhungiyas, and Desi-maler; and they not only eat and intermarry with the Maler of the hills, but speak the same language, although they all understand the Hindi dialect, serving as interpreters for those who come from the wilder recesses of the mountains. They have adopted the use of the plough, but in feeding retain all the impurity of the mountain infidels. The Beherbhungiyas are chiefly confined to the eastern parts of the estate belonging to Kaderali, and called the pergunah of Godda, where they have no authority or wealth to render their conversion worth while, and where they are living in the immediate vicinity of those who glory in their impurity. On the adjacent estate of Chandwe, which belongs to one of their own chiefs, the people have taken the name of Angwar-bhungiyas. They live entirely by cultivation with the plough, and have no other language except an impure dialect of the Hindi. Their huts are uncommonly clean. They have abandoned the abominations of beef and poultry, and are contented with the less odious repast of pork.

Before I proceed to trace the Bhungiyas any farther, having now mentioned those who, like the Maler, are in the progress of adopting the Hindi language and customs, it becomes necessary to trace the history of the southern tribe of the Rajmahal mountaineers, who have adopted the language of Bengal, and some of its manners, Mr. Shaw mentions that they are different from those of the north, but he confines his description entirely to the latter, on which account I shall be under the necessity of giving a more detailed account. I have already mentioned that the northern tribe consider their southern neighbours as brethren, and call them Maler, the name which they give themselves; but the southern tribe, shocked at the impurity of the others, deny this

consanguinity, and most usually call the northern tribe Chet, while they assume to themselves the denomination of Mal or Mar, which however is probably a word of the same derivation with Maler. The Mal however divide themselves into three tribes, Kumarpali, Dangrpali, and Marpali; and they often call the northern mountaineers Sumarpali, thus, as it were, acknowledging a common origin, which I have little doubt is the fact. The manners and the language of the three southern Pali are the same, and they speak a very impure dialect of the Bengalese.

I shall now proceed to give an account of their manners, taken mostly from Sumer Singha, their principal chief, and his attendants, during a visit with which he favoured me at Dumka.

The three Pali were originally local distinctions, but now all live intermixed, have exactly the same customs and language, and intermarry; but there are five real hereditary distinctions, which descend in the male line. The highest rank consists of the Rajas or chiefs and their descendants, all of whom are called Singhas or Lions. They say that six or seven generations ago two brothers, Aku and Paku, both Rajputs, came into these parts. Aku, the eldest, obtained the Pergunah of Sultanabad, adjacent to the territory of the Mal. Paku went among the mountains, married a highland girl, and persuaded the people to abstain from beef, which they had formerly used. Three Rajas and many Singhas claim a descent from this person, and hold the highest rank. Next to these are certain families that were at one time rich, and are called Grihi. They assisted their poorer brethren with loans, and seem to have been a kind of bankers, like the Vaisyas of the Hindus. They never seem to have held any office in the state. The third in rank were the Majhis or chiefs of villages, and none but persons of this rank were ever permitted to hold this office. The persons of the Aheri or fourth class were by birth hunters; and at first, in all probability, were the lower and labouring class, like the Sudras of the Hindus; for what is now considered as the lowest and fifth class is composed of the Naiyas, who are allowed to have originally been the priests, but

have been totally discarded from that office. It must be observed, however, that by the neighbouring Hindus the term Naiya is usually given to the whole tribe. The Raja and his people knew nothing of the word Dungarea by which Captain Browne calls the common class of the hill tribes, they use the Bengalese word Praja. All the five ranks now follow nearly the same occupations. They cultivate the ground, hunt, and make charcoal, which last is their grand resource for procuring salt, cloth, iron and tobacco, the articles which they chiefly import. Few or none of this southern tribe are in the Company's service ; none are employed by the post office, and only four men, as far as my informants knew, are soldiers ; very few also receive pensions. But they are abundantly quiet and civil, and are fast improving in their agriculture. They have many cattle, and many of them cultivate with the plough. Inoculation for the small-pox has been introduced.

The Rajas or Serdars, who receive pensions of ten rupees, and some of the Nayeps, who receive three rupees, are of the rank of Singhas. The remainder of the Nayeps, and all the Majhis who are pensioned at the rate of 2 R. p. m. are of the rank of Majhi. Before the settlement made by Mr. Clevaland the Raja had considerable power. From among the persons of a certain family he appointed a Majhi for each village ; but after his appointment the Majhi could not be dismissed without the consent of an assembly of the whole tribe, from which no one was excluded. The Raja appointed also a Foujdar to command in predatory excursions, and could dismiss him at pleasure. He also appointed a Dewan. Each person gave annually to his Majhi some share of his crop, a goat, a pot of honey, and a bundle of rope ; and the Majhis again gave to the Raja a share of what they thus procured. This custom continues ; but the Foujdar is no longer necessary, and the Majhis are considered as hereditary by right of primogeniture. The land seems to be the property of the cultivators. On the hills and swelling land the field is cultivated two years, and then lies fallow for five or six ; but a man may prevent any other from cultivating his fallow land.

✓Every family has some land, but some have not enough, and these at spare time work for wages. There are no slaves. x

A field thus cultivated after a fallow is called a Vari and in the hills is not ploughed ; but in the low country it is often ploughed, and there some of the Mal possess rice lands, that every year are regularly cultivated. Their huts are usually contiguous to the Vari, and near them they have small gardens, in which they rear plantains, capsicum, and green vegetables. On the hills the Vari is not ploughed nor hoed. The men cut the trees and burn them, and the women sow the seed. On the first year they scatter over the surface seed of the kinds of millet called Kheri and Kangni; and with a stick pointed with iron, form small holes, in which they drop seeds of the Maize, of Janera and of a pulse called Bora or Kalai. In the second year they plant only the Maize and Janera. In the Varis on the low lands, which are ploughed, they raise the same articles as on the hills with the addition of rape-seed and sesamum. They collect wild yams, and besides cows and oxen, for milk and labour, they rear swine, goats, fowls and pigeons for eating. They ferment both Maize and Janera, and usually drink the liquor without distillation; but some are acquainted with the art. They make no cloth, and cannot work in iron.

They have most of the instruments of music commonly used in the low country, and have adopted inoculation for the small pox. Although their progress in agriculture is greater than that of their northern neighbours ; their huts are much more wretched and dirty, their clothing is more scanty, and their women are less cleanly and worse provided with ornaments. This, I presume, is owing to a consciousness of impurity and sense of degradation which has taken away the pride that induces men to labour for distinction.

The Rajas and some rich men have fallen under the dominion of Varna Brahmans and Dasnami Sannyasis. The former have instructed them how to worship Durga at the festival called Dasahara, and to repeat prayers before a Bel tree (*Aegle Marmelos*) and these Brahmans repeat prayers at marriages, and in commemoration of the deceased. The Dasnamis perform Yaj for their flock, that is, pray over a fire into which boiled butter has been thrown, and they give them Upades,

or a secret form of invoking God. The Naiyas, formerly thier Gurus, and Purohits, have been discarded by all, and every family, except the rich who have procured the above mentioned Hindu priests, performs its own ceremonies. Every year two great festivals or sacrifices (Pujas) are usually performed. One is in Aghan when the Janera and pulse are ripe. Offerings of the fruits, hogs, goats and fowls, are then made to Serkham and Lakhima. The other is in Magh, when the maize ripens, and similar offerings are made to Basumati. At these feasts each man makes his own offering, prays for favour and success, and thanks the Gods for the harvest. The family then dances, sings, feasts and drinks, as much as it can procure. They are not, however, altogether, without a kind of priests of their own. These are called Dewasi, and seem to be analogous to the Demanus of the northern tribe. The Dewasi is instructed by persons of that order in the forms of prayer and ceremonies necessary to be used in sickness, in the bites of serpents, or against devils, all of which evils are supposed to be the agents of Masan, a malevolent deity, of whom I have made mention in former accounts. The other Gods of the tribe are benevolent. Serkham is the chief, Lakhima is his spouse, and Basumati is their son. These deities have neither images nor temples, and all are called Gosaing, the name used for a deity by the northern tribe.

The bodies of the dead are burned on the same day that they died; and, if the person has been of rank, a Brahman performs ceremonies. The kindred mourn five days, and then give a feast.

Among the rich, who have Hindu priests, premature marriages are in use; but the poor often wait until the girl is 20 years old; her inclination however is never consulted. Her parents always receive some money from the bridegroom, but not enough to defray their expense. A man may marry several wives. A widow may live as a concubine (Samodh) without any religious ceremony, but the connection is permanent. Adulteresses are turned away, but may become concubines. If an unmarried woman prove with child, her paramour must marry her. The eldest son at present succeeds to all dignities and land, but he gives his brothers a share to cultivate, and a father's

moveables are divided equally among his sons. The women are left to be provided for by the sons until they are married, or become concubines.

It must be observed that the Rajas employ many lowland tenants to cultivate part of their possessions, and these compose a considerable proportion of the 20,000 persons by whom I suppose their territory to be occupied. The Suzawul calculates this tribe to amount to 20,000 houses, but I have no doubt that this is a gross exaggeration, and that from two to three thousand will be found a more near approximation to reality.

My informants have no tradition concerning their tribe having emigrated from any other country, nor have they ever heard of any emigration from their hills ; but in the hills of Mallepur, south from Mungger, there are about 100 families of a similar rude tribe called Naiyas, the name usually given to the Mal by the neighbouring Hindus. These live by cutting timber, and have scarcely any agriculture. Neither Naiyas have indeed any knowledge of the other, but considering the distance by which they are separated, and their rudeness, this cannot be considered as a proof of different origin. The Naiyas of Mallepur if it true, speak the Hindi language, and those of Rajmahal speak Bengalese, but I suppose that both originally spoke the same language with the Maler, and have learned their present dialects from the more civilized nations by whom they were respectively surrounded.

It is not surprising that the Raja and his attendants should have known nothing of the Naiyas of Mallepur for they did not know anything of the Mal or Mar of Pergunah Godda, which forms the south-east corner of the division of Bangka, and of which they seem to be the original inhabitants. They eat and intermarry with the Mal of the adjacent hills, but all have betaken themselves to the plough, and many of them speak the Hindi dialect, which prevails in the vicinity. All the Pujaris or priests of the temples in Godda are of this tribe, and even the Siva of Deodanda, the only idol of the Brahmans which it contains, is served by a Mar. The Mar may amount to about 500 families.

In the low country on the eastern side of the hilly tract belonging to the Mal, in the divisions of Kalikapur,

and Aurunggabad, are about 125 families of a tribe called Raja or Ray mal, who have entirely adopted the usual manners of the lower tribes of Bengal; and have abandoned fowls. They acknowledge that formerly they were as impure as the other Mal, and that they have a common origin. They assume the title of Ray from their predecessors having formerly been the owners of the country.

Now to return to the Bhungiyas, we find their greatest numbers extending in a line west from the hills of the Mal to those occupied by the Naiyas of Mallepur, along the southern boundary of the district, but some are settled among the Mal of Kalikapur. These last call themselves Ghatwali-Bhungiyas, but evidently hold with regard to the Mal the same connection which the Beher Bhungiyas do with the Maler; that is, they eat with them, intermarry, and speak the same language; but, living on the plains, they have adopted entirely the customs of the impure tribes of Bengal.

West from the Mal, on the estates of Rupnarayan and on those of many other chiefs dependent on Kaderali, are many Bhungiyas, who are called Ghatwal or Ray-Bhungiyas, from having been a militia to guard the passes through the mountains, or from their being the ancient owners of the country. The lowest classes of them readily acknowledge these names, but the higher ranks now spurn such base designations, abhor the word Bhungiya, as much as the Magahi Brahmans but will only confess that formerly, when oppressed, that [they] were called Ray. They pretend that they are descended from the sun, and call themselves Suryabangsi Kshatris, descended of Anrula the son of Prithu Raja, who lived in the first age of the world. This pretence would appear to have been set up since the time of Captain Brown [e], by whom it is not mentioned, and who considers the whole Bhungiyas as a low tribe.

Their chiefs of the highest rank are called Tikayits, from having received the mark of royalty. The principal younger branches are called Thakurs, and the younger branches of their families are again called Babus.

In every place, except where the Bhungiyas are numerous and powerful, their pretension to noblesse is held in the highest contempt; the whole is considered as

of a common origin, and by the Brahman who assisted me in giving this account they were thrust into the dregs of impurity, among tanners, shoe-makers and watchmen, tribes who eat beef, as is said to have been the case with all the Bhungiyas until of late. Where the Bhungiyas are powerful their degradation would be imprudent, and Maithila Brahmans not only give them instruction and perform their ceremonies, but in that vicinity are not considered as degraded by this condescension. The Dasnamis, however, are allowed to instruct the lower ranks, and the greater part of these, at least such as acknowledge the name Ray or Ghatwali Bhugiyas, have no priest of the sacred order, but have Purohits of their own, who worship the sun and Basumati. The latter is one of the deities of the Mal, and the sun, I was told, is the same with Bedo Gosaing, that is, the great God, who is worshipped by the Maler. The Ray or Ghatwali Bhungiyas have however given up all communion with the Mal, although they still continue to eat goats, pork, and even fowls. Those who call themselves Suryabangsi observe the rules of purity required of Rajputs, and have assumed the thread of distinction (Janau) which that tribe wears.

The Bhungiyas are addicted to arms and plunder, cultivate with their own hands, collect wax and rosin, and rear Tasar. They are very jealous of their women, with I believe very little reason. They seem to be somewhat attached to their chiefs, but this virtue is said to have diminished since they have lost the tie of being exposed to common danger, and the sweets of predatory war. The person of by far the greatest power among the Bhungiyas is Rupnarayan, but, as he has only the rank of Thakur, his authority is beheld with envy by the Tikayits, who are by birth his superiors.

All the Bhungiyas, except the Behers and Angwars, speak a kind of Bengalese, but many, even some of the Tikayits, speak it so corrupted and so intermixed with a Hindi equally impure, that my assistants scarcely could make out their meaning.

Of the whole Bhungiyas there may be in the district between 7000 and 8000 families. Such confusion prevails among them, owing to their various claims of purity that I have not been able to form any conjecture concern-

ing the respective numbers of each kind. Their huts in general are the cleanest in the district.

There is a tribe called Kadar very numerous in Bangka, and a few in Lakardewani and Ratnagunj. On the whole they may amount to from 27 to 30 hundred families. They are probably aboriginal, and are quite impure, eating beef, buffalo, pork and fowls. They live by cutting wood and bamboos, by collecting honey and rosin, and by cultivation. They speak an impure dialect of the Hindi, scarcely intelligible to those who are not acquainted with them. They pray to Nilamata and Dano, and have priests called Bhungihar, Japahar, or Pujahar. They do not marry until the girls attain maturity, and burn the dead. In my account of Puraniya I have mentioned a tribe of fishermen named Kol. They there informed me that they originally came from this district, but here I have only heard of one family which lives in the same manner as the Kol of Puraniya. In the wilder parts of the district, however, there are about 300 families of Kol ; but these still retain a language totally different from the Hindi or Bengalese, which are used by the Kol of Puraniya. Of this a specimen has been given in the vocabulary which accompanies this account. The Kol here live chiefly by collecting and smelting iron ore, but at their leisure they also cultivate the land. This shows that the same tribes, in different circumstances, follow professions totally different. They seem to be an aboriginal race, and their manners in other respects are pretty much the same as in Puraniya. They eat cows, swine, and fowls. They have priests of their own, who pray to Pahar Dano ; and the Sun is their supreme deity, and is called Bongga.

The Saungtars are a tribe that has a peculiar language, of which also a specimen has been given in the accompanying vocabulary. So far as I could learn, about 500 families are now settled in the wilder parts of the district. This however, they say, is a late event, and that they came last from Virbhumi in consequence of the annoyance which they received from some Zemindars. The original seat of this tribe, so far as I can learn from them, is Palamo and Ramgar. They are very expert in clearing forests and bringing them into cultivation, but seldom endure to pay any considerable rent, and whenever the land has been

brought into full cultivation, and the customary rent is demanded, they retire to the wastes belonging to some other Zemindar. A whole village always moves at once, and their headman (Majhi) makes a bargain with the new landlord for the whole, agreeing to pay a certain sum for as much land as they can cultivate. At first they pay a trifle, but this is gradually increased until the full sum becomes due. If any attempt is made to take more from any individual, the whole run off. The Majhi levies the assessment on the individuals, according to the stock which each possesses. The office of Majhi is considered as hereditary, but if the people of a village are discontented, they apply to the Zemindar, and say that they will no longer pay their rents through such a man ; but wish to have such another person appointed their Majhi. There is no distinction of family rank between the Majhis and their inferiors : all eat in company and intermarry. They say that formerly they had chiefs called Ghatwals ; but that the whole were caught and put to death by the Marhattas.

The Sun is probably their principal deity, as he is of the Maler, for they call God and the great luminary by the same name ; but the most common objects of their worship are Morang burha, and old man, Marako his younger brother, and their sister Jahar burhi an old good natured creature, who never does them any harm. In the month Chait offerings of female goats are made to the sister, and of male goats to the brothers, and to all, when the first fruits of harvest are ripe, they offer some of the new grain parched, and some milk. When sickness attacks the Saungtars, they also offer sacrifices to their Gods. They think that their deities are like wind, and do not represent them by images, nor do they pretend to know where they live. They do not think that the gods will punish them for sin, but expect that they will show them kindness in return for worship, or if their fortune (Nasib) is good. They have heard of heaven and hell, but seem to have very confused notions of a future state. They seem to think that the whole tribe, whether good or bad, go to Patal, a name that the Hindus give to hell ; and they seem to think that, although not a place of punishment, it is far from being an agreeable abode

In this district they are not more remarkable for their belief in witches than their neighbours. In their original seat, it would appear from a paper of lord Teignmouth (*Asiatick Researches*, Vol. 4, page 345) that they are uncommonly barbarous on this point. It must however be observed that in their ferocity they were probably guided by persons of higher rank, who could write, for the mode of trial mentioned by his Lordship implies that art, of which the Saungtars are ignorant.

The Saungtars burn the dead, and mourn from three to five days, after which they give a feast. They acknowledge that they eat goats, buffaloes, swine, fowls, and even beef, that has been killed intentionally to gratify their monstrous appetites. The Pandit alleges that they also eat serpents and monkeys, but he views them with great abhorrence, and considers their Gods as no better than the devil (Bhut). They use fermented liquor prepared from grain. They marry very early, usually when from three to five years of age, and always before the age of ten. The father of the girl receives money, but not equal to the expense which he incurs. If a man has no children, he may obtain his wife's consent to marry another, who has equal rank with the first: the vixen sometimes, however, refuses leave, and without that a second marriage cannot take place. A widow, who has had no children, may marry a widower; but if a widow has children, she must continue single. Formerly the cuckold put both his wife and her paramour to death; but they are now afraid of the law, and abstain from going to such lengths. The guilty parties are expelled from society, and the deserted wife and her children are taken care of, as if she was a widow and they were orphans. In fact they seem to be excessively jealous, as the women were kept totally out of sight, while the men flocked round to satisfy their curiosity.

They say that their religious guides, and the priests who perform their ceremonies are Kulin Brahmans, who reside near the Damodar river in Barddhaman, an assertion that raised a smile of contempt among my Bengalese assistants. In fact, the priests are probably some low Dasnamis, to whom they have given the highest title used by their more enlightened neighbours of Bengal, as it can,

not be supposed that a Kulin Brahman would debase himself by taking notice of such an impure scum, especially as there is among them no person of weight. These priests have taught their rich men to please the god Siva by swinging before his image, suspended by iron hooks passed through the flesh of their backs. This they do in consequence of vows, which they are taught to make when in any eminent peril. These priests do not attend at any offerings made to the three common Gods of the tribe, each person offering for himself ; but they attend at funerals, and sometimes at marriages, although these are often entirely conducted by themselves, in a meeting of the heads of families. They have Ojhas, who repeat incantations for the cure of disease, and of the bites of serpents. The Saungtar use the plough in cultivation, and employ the female buffalo and cow in both plough and cart, an abomination that on their first arrival occasioned resistance ; but they have been able to persist.

The Saungtars play on two kinds of drum, and on a flute made of bamboo with six holes. The second is soft, but their airs are very monotonous. To remedy this defect, they often sing and play the same air alternately. They use the plough, and have cattle. Some of them rear Tasar. Their huts are very mean and slovenly, the roofs low and flat, and the walls made of small sticks placed on end parallel to each other.

The Dhanggar are another mountain tribe, originally from Chhota Nagpur but Dhanggar is a Hindi word. In their own language they are called Urau. Some years ago they began to come here, looking for temporary employment from the Indigo planters; but, liking the service, about 45 persons have brought their families and taken up a fixed abode. They have a language peculiar to themselves, and are a very industrious active people, who cultivate, act as day labourers, and are willing to carry both burthens and the palanquin. They eat swine, beef, and fowls. They have no Guru nor Purohit.

In giving an account of general manners of the Hindus, I shall chiefly confine myself to those which belong to Magadha, and these differ very little from those of Mithila, which have been described in my account of

Puraniya. I shall therefore confine myself to the mention of their differences.

The pure castes are allowed to eat rice cleaned by boiling, an indulgence, however, from which a great many abstain, especially the Baniyas. Brahmans do not eat meat, except such as has been sacrificed, and that of weathered goats. The other pure tribes do not eat tortoises, and as usual the sect of Vishnu, even of the lowest rank, abstains entirely from animal food and liquor. On this account, people of this sect seldom take Upades until advanced in years. Many of the hill tribe kill and eat the ox, and some of them eat rats, serpents, and jackals, and monkeys.

Some Brahmans smoke tobacco. Except Brahmans, Rajputs, a few of the Baniyas, and the sect of Vishnu, all avowedly drink spirituous liquors.

Somewhat more than in Mithila celebrate their parents' memory in the Tithi; but they only observe the Amabasya of the month Aswin. The people here have no objection to live in a house where a person has died; but yet they very seldom allow anyone to die in the house, lest he should become a devil or ghost. If near the holy river, the moribund are placed with their feet in the water, and the Purohit reads prayers until they die.

The low castes marry earliest; but the high castes almost always procure matches for their daughters before they reach the age of maturity. The two most heavy expenses which a Brahman incurs, are the marriages of his children, and the assuming the thread; but if they have not money enough of their own, they can usually raise it by a subscription of the neighbours. The season for marriage lasts [? through] Magh and Phalgun, stops in Chait, and recommencing in Vaisakh, continues all Jyaishtha and Asharh. The expense and noise are intolerable, and for a great part of the time many people continue idle, going from one feast to another. There is little or no trouble in matching their girls with persons of proper rank; the Brahmans here being less attentive than in Puraniya to distinctions of that kind. The men very seldom take a second wife, unless their first has lived long without having children.

Among the castes who keep concubines, the younger brother cannot take the elder's widow except she is willing, and she may go with whomsoever she pleases. The concubines are widows, and are not connected with their keeper by any religious ceremony; but the connection is indissoluble, except on account of infidelity. They are called Samodhs, Sagai, and Chuman, and their children may intermarry with those of virgin spouses. An unmarried woman who has had a child cannot be married; but, if her lover has been of the same caste, she may live with him as a Samodh; he must however in that case pay a sum for purification. If her paramour has been low, she is turned out of her caste, and her kindred must pay the expense of purification before they will be received in company. The children of private connections are illegitimate.

Widows in some parts burn themselves pretty frequently, especially the Bhojpuri tribes settled in Mungger. In that town about one in a year many burn herself, and in the whole district besides there may every year be about two sacrifices of his nature.

In my account of the castes I have mentioned the principal sects to which each is addicted. The Pandit of Mungger thinks that in Magadha the three sects of Vishnu, Siva, and Sakti are nearly equal in number.

The doctor chiefly followed by the sect of Sakti is Krishnananda. None profess themselves of the Virbhav, at least in Magadha; nor is the Syamarahasya in request.

In the Bengalese part almost all the sect of Vishnu worship Krishna. In Magadha and Mithila they chiefly worship Ram. There are a very few of the sect of Saur and Ganapatya.

All sects and tribes make offerings to the Grama Devatas, but the sect of Vishnu do not kill the animal; they turn it loose. In the account of the topography of the divisions I have mentioned the most usual of these deities, many of which are males, and seem to have in general been rather men celebrated for their piety than for their heroic actions. Many again, both male and female, seem to have been the deities of rude tribes who formerly inhabited the country, and whose descendants

have been converted. The females have usually annexed to their name the title Mata, just as in the south of India they are called Uma, both words signifying mother. Many again of these gods are called Bhut Devatas or devils, by the Brahmans, who however do not fail to worship them. They have no images, but sometimes a rude stone, or where that cannot be procured a lump of mud, generally on a hill, or under a tree. Many have Brahman Pujaris, and many have persons of low or even vile tribes approaching on being Mlechchhas : some of both kinds have endowments. In the part of the district, which formerly belonged to Behar, the priests of most of the village deities are called Kaphri, a word peculiar, I believe, to that part of the country. The Kaphris are supposed to be capable of inspiration by gods and devils. Those who are in danger from disease not only apply to procure favour from the god, but to know the result. When the Kaphri makes the offering, he becomes violently agitated, and, after the usual mummary, gives a response. When people are bitten by serpents, they are in many parts carried to a temple of Bishahari, and the Kaphri pretends, by looking at a pot of water, to foretell the event. If the water is agitated when the offering is made, it is supposed that the deity has come to assist in the recovery, which will of course take place. It is not only the Kaphris that are supposed to be capable of inspiration ; but the devils or gods are supposed to inspire another class of men called Chatiyas, who on such occasions are violently agitated and give responses. Some of these Chatiyas are Brahmans, others are low fellows. The ignorant worship them, offering sacrifices, milk, sweetmeats, and the like. Each Kaphri or Chatiya, who pretends to be inspired, has an attendant named Phuldhariya, who conducts the ceremonies, and holds his master while he pretends to be deprived of reason by the deity or devil. He also explains what his master says, which is generally unintelligible. In fact he is generally the greater rogue of the two.

The following are the chief Grama Devatas.

Kali, in some places called Burhi Kali, is well-known as the great object of worship among the Brahmans of Bengal.

Siva is in some places here considered as a Grama Devata, is sometimes called Kanggali or the beggar, in others Burhanath, in others Gaurisangkar, and in others Bangkanath.

One of the most common is Bishahari, the terrible reptiles under her authority being uncommonly destructive.

Siddheswari, Chandi, and Mahamaya, are not very common, and I saw none of Sitala.

Makeswari is a female deity.

Dubebhayharan, in the very extensive territory of Kharakpur, is the most common village deity. He is supposed to have been a Brahman of Kanoj, on whose lands Abhiram, a Kshetauri Raja, built forcibly a house. The Brahman, in order to be revenged, ript up his own belly, and, having become a devil of the kind called Brahmadasya, has ever since been a terror to the whole country. In particular he has destroyed the whole Kshetauris; and those who call themselves such, are alleged by the Kaphris of this God to be mere pretenders.

Pachuya, a male devil, who destroys children.

Ram Keyari, a male deity.

Mahadano or Dano and Pahardano, a male god of the rude tribes.

Bisurawat, who was a holy man of the Goyala tribe.

Chamu foujdar who was a holy man of the Tiwar tribe.

Kama and her husband Hira were two holy persons of the low tribe called Musahar.

Chaldev, a God of the Maler.

Nilamata, the god of several rude tribes.

Hari Ojha, a male saint.

Ratnamohan, who was a Zemindar Brahman, that was killed by a tiger, and became a devil, of whom every one is exceedingly afraid. He is chiefly worshipped at marriages.

Kokilchandra is a devil exactly of the same kind, but he is addressed chiefly at harvest. Several of his priests are Brahmans.

Jaguhajra, a watchman or Dosad.

**Garbhakumar.** This devil, according to some, was a potter, according to others, a milkman ; but it is generally believed, that like the two Brahmans, he was killed by a tiger, and his ghost has ever since been a terror to the neighbourhood, and it is deemed prudent to worship him. His priests are milkmen.

**Bhaiya Singhamata,** a female.

**Sivaram Thakur,** a sainted Brahman of Kanoj.

**Ram Thakur** another.

**Kshemkarni.** This goddess is said to have been brought into high repute by the following circumstance. Bodh Chaudhuri, grandfather of the present Zemindar of Suryagarha, was going, as usual in these good old times, to fight with his neighbour Narayan Datta of Sulimabad, On his march, as he came near the tree, which shades the abode of Kshemkarni, a kite of the kind sacred to this deity (*Falco ponticerianus*) made a screaming, which the Raja considered as favourable omen, and vowed that if he had success he would make offerings. He advanced with confidence, cut off the heads of Narayan Datta and of his kinsmen, and returned covered with glory.

**Kalkali,** a female deity.

**Ajan Singha,** a sainted Brahman.

**Sales,** of whom I have made mention in my account of Puraniya.

**Kamalnaiya,** a sainted or bedevilled Brahman Bhimsen, mentioned in my account of Puraniya.

**Vindhya vasini,** a female deity.

**Rakshasi,** a deity of the Maler.

**Sikharavasini,** a female deity.

**Bajun,** a female deity.

**Takshak.**

**Sanggu Mandal.**

**Satbhaiya.**

**Loknath.**

**Sabal Pahalwan.**

**Babu Ray,** a male devil. **Brahma Devata,** a deified saint of the sacred order.

In many villages the deity is anonymous, and is merely called **Grama Devata.**

In Magadha the Charakpuja is not in use, except among some Bengalese settlers.

The chief worship among the Hindus of this district is bathing in the river, and pilgrimages. In the topography have been mentioned the places of the district that are frequented, and the usual numbers that assemble. Out of the district, Baidyanath is the chief place of resort; perhaps one quarter of the Behar population, including women and children, and the western tribes settled in the part of Gaur belonging to this district, go there annually. Few of the Bengalese give themselves the trouble.

Next to Baidyanath, Harihar Chhatra at the junction of the Gandaki and Ganges, opposite to Patna, is the place resorted to by most people of this district. Perhaps 5 or 6,000 go there on the Purnima of Kartik. It is a great fair, and the trade and amusements of the place seem to be a principal object.

About equal in reputation is the Mela near Kang-raghola, at the junction of the Kosi and Ganges, as mentioned in my account of Puraniya. To Jagannath perhaps 1,000 people may go annually, and as many to Janakpur; 500 may go to Gaya, and 300 of these may go on to Kasi. Perhaps 100 go to Kasi alone. Perhaps as many go to Prayag at the junction of the Yamuna with the Ganges.

Here the worship by hoisting flags is not fashionable. In the Bengalese part, during the month Kartik, many people hoist a lamp, and bunch of sweet basil, (Tulasi), at the end of a bamboo.

In Behar the Holi is much more celebrated than the Durgapuja, or Dasahara. In the Bengalese part the reverse is the case. At the Holi great multitudes of men assemble, wherever there are images of Krishna and Radha, and sing indecent songs, and throw red starch at each other.

In Sravan (from the middle of July to the middle of August), at a festival called Jhulan, the women and children assemble at night, and amuse themselves by a swing, and celebrate the loves of Radha and Krishna in songs.

The Goyalas in October or November, celebrate a holy day called Govardhanpuja or Annakut Yatra. They pray to a heap of boiled rice, which is supposed to

represent the hill Govardhan, where Radha and Krishna passed some of their time ; and make an offering of food, red lead, turmeric, and flowers, to each animal of the cow kind that they possess. They also repeat some prayers to the sacred herd.

The Sudras are not allowed to read the sacred books, and the Kshatris do not give themselves the trouble.

In Kartik, Magh and Vaisakh, some learned men read small portions of the Purans to the rich, and explain the meaning in Hindi. The portions selected explain the modes of worship, that will be agreeable to such and such Gods, and procure such or such blessings.

The people of Magadha have little or no objection to take an oath by the river water.

The Purohits have here much more profit than the Gurus or religious guides, although every Hindu here, as elsewhere, acknowledges that his Guru or spiritual guide is perfectly equal in wisdom and power to God.

In a few places are some Brahmans, who perform the ceremonies of those only who abstain from Samodh ; but in others the same person officiates for all the pure tribes. The whole are called Paurohityas, and the term Dasakarma is not in use. There are here no Chausakhis ; each impure tribe has a sect of degraded Brahmans peculiar to itself.

No Guru of the Sakti sect has any considerable influence. They are mostly Brahmans, but the Dasnami Sannyasis have begun to interfere.

The Saivas do not here conceal their sect. The Brahmans of this opinion have Gurus among their own order. The Rajputs and Sudras are under the guidance of the Sannyasis as in Puranya. In this district there are scarcely any of this order of men who are merchants, perhaps five or six houses ; and many of those, who act as spiritual guides, are (Udasin) unmarried, and are supposed to observe the rules of their order. There are of them about 30 Akharas, the most distinguished of which is on the rock near Sultangunj, that is surrounded by the Ganges. Each Akhara contains several Sannyasis under the authority of a Mahanta or Mathdhari. They seemed to me to be poor ignorant creatures, very

pious, and zealous in the mortification of the flesh. Some of them can read, but only one of them understands any Sanskrita. Of those who have married, and have become San-Yogis are 150 families, who also act as instructors. Some of them have endowments ; others rent land, and employ servants to cultivate ; none of them have any sort of learning. By far the greater part of the people of the sects of Siva and Sakti are instructed by strangers, who came wandering through the country, and those who have their houses or Akharas here, wander in the same manner ; for it would appear, that the more they are known the less they are respected, or that like the prophets of old, they are little valued at home.

The Kanphatta-Yogis or disciples of Gorakshanath have a few disciples in this district ; but none of them reside. Such of their disciples as I have seen were religious mendicants, calling themselves Janggams, and residing at Mungger, where there lately were 18 houses ; but 13 of them have retired, having found inadequate encouragement. They say that there are six sects (Darsan), true representatives of the Gods, who ought to receive the charity of men, namely Yogi, Janggam, Seora, Sannyasi, Durwesh, and Brahmans, the Yogis being the highest and the Brahmans the lowest, while the mendicants of Jain (Seora) and Moslems (Durwesh) hold a middling rank. They also say that there are 36 kinds of Pashanda or pretenders, and that these have run away with all the profits of begging. Among these pretenders he reckons Vaishnavs, Vairagis etc.

The Janggams are married, and observe the rules of purity commonly kept by Sudras of the sect of Siva ; that is, they eat the meat of sacrifices and fish, drink spirituous liquors, and keep concubines. All their male children follow their profession, which is that of mendicants. The women do not beg. The men when begging, sing concerning the nuptials of Siva and Parwati, ring bells, and make various noises to attract notice. They wear many beads, and have on their head an ornament of brass, which they call a temple of Priapus, and it contains an image of the great god. They consider themselves as representatives of the sun, but worship

Siva alone. They are followers of Gorakshanath, who was born of a cow, impregnated by their god. The fable is vastly too indecent for paper. Gorakshanath is however considered as a god, and his disciples, the Yogis, as I have said are the Gurus of the Janggams. Their ceremonies are performed by Brahmans of Mithila, who are not degraded. Their dead are buried. They would admit proselytes from the highest ranks ; but afterwards would neither eat in their company, nor give them their children in marriage. They take no share in the instruction of the disciples of the Yogis. They are quite ignorant, and imagine that Gorakshanath was begotten, while Vishnu was churning the ocean, a fable which seems to be in favour among the Hindus, in proportion to its monstrous extravagance. Of the Aghorpanthi, it is said, that there are 19 persons or heads of families.

At Munger I procured an interview with Betalnath, and one of his pupils. The chief was said to be at the head of all the sect in this district, and was called Guru ; but was so drunk as to articulate with difficulty, and he could never read. It cannot be supposed therefore, that through such means I could obtain a rational account of this curious sect. The pupil (Chela), who was tolerably sober, alleged that the Guru would succeed to the dignity of Kinanath of Banaras, when that chief of the whole order died. The Gurus should abstain from all connection with women, and the Chelas do not marry ; but they have families by women of the sect, who by exchanging necklaces form permanent connections equally binding with marriage. All the men are called Nath and the women Nathinis. Disciples may be admitted from among Brahmans, Kshatris, Khatries and Rajputs, but from no other caste. Betal was born a Rajput. The Gurus have no fixed abode, but go from one Chela's house to another ; and the Chelas live entirely by begging, or rather by terrifying weak people ; for their customs produce universal abhorrence. They are permitted by their rules to eat whatever they please, even human carcases, which they occasionally do, as they say, merely to excite the astonishment of those from whom they wish to procure charity. They do not care who cooks their victuals. They say, that there is only one god, Nirakar

(the immaterial) Brahma, at least, that he is the only proper object of their worship; for it does not seem ever to have entered into the imagination of my informants to dispute the existence of other gods. They say also, that they follow the doctrine of Gorakshanath, and that some few of their Gurus can read.

In the eastern parts of the district the Goswamis of Bengal have by far the greatest influence, especially the family of Nityananda, who may have ten-sixteenths of the people of this sect. One of the family called Ballabikanta, has taken up his abode at Syamgunj in Aurungabad. He is not considered as a man of learning. Another branch of the same family is represented by Tilakananda, Chhabilananda and Premananda, who live at Nasipur and Panisala, near Murshedabad and at Junggipur. The eastern part of the district is considered as their property (Velayet), and every worshipper of Krishna gives them somewhat, although he may have another Guru. They have appointed a Foujdar, who resides at Manggalpur. To assist him in collecting their dues, they have from 25 to 30 Chhariburdars. These officers are not Brahmans, and take no share in the religious duties, which are performed by Adhikari Brahmans for the high castes, and by Vaishnavs for the low. Acharya Prabhu descended of the same doctor, and mentioned in my account of Puraniya, has about two-sixteenths. The descendants of Adwaita residing in Bholahat have about 2 anas. The Ramayits of the west have procured the remainder, except about 400 families belonging to Thakur Mahasay.

In this district are about 14 Adhikari Brahmans employed to instruct the followers of Madhavacharya under the above-mentioned chiefs. Except about 200 families at Rajmahal, the Sarkar Thakurs have not here procured any followers. In the western parts this sect of Madhav has made very little or no progress, except at the capital.

The Udasin Vaishnavs, who act as Gurus for the lower ranks, amount to 140 converts, and have not married. Many of them are vagrants, and 100 of the converts are in the capital, where the customs of the vicinity require a considerable restriction on the acts of the flesh.

Of the married Vaishnavs there may be near 700 houses, many of whom are the Gurus for the lower classes in the part of Bengal belonging to this district. There are besides about 50 houses of Gaur Vaishnavs, all married. None of the Sakhibhav Vaishnavs reside; but those of Puraniya act as Gurus for some people in this district. There are here no Narha Vaishnavs.

Confusion arises from the term Vaishnav being applied to the religious among the worshippers of Ram, as well as to those who adore Krishna; and the Ramanandis and Ramayits or Vairagis are considered as the same, although the one are descended of Brahmans, and the latter Sudras. Those, who abstain from marriage, in this district amount to 18 Akharas; and those who have married to 35 houses, but a vast many strangers frequent the country. Some of the most remarkable convents of this order are dependent on the Mahanta, who resides in the Mastarami Akhara at Murshedabad.

In this district are a very few, who adhere to the doctrine taught by Ramanuj, the master of Ramananda, and Govindadas; a Brahman of Bhagalpur, acts as a Guru for those who, according to the doctrine of the great teacher of the Sri Vaishnavs, worship Vishnu under the name of Narayan.

There are a very few families, who are guided in the worship of Vishnu by Brahmans, who have forsaken the pleasures of the flesh, and are called Brahmachari Vaishnavs; but none of these reside, nor have I been able to procure any account of their doctrines or history.

About 16 convents of unmarried instructors, who point out the way to heaven called the Kavirpanth, are to be found in this district, where they have many followers. No one consults those who have yielded to the flesh, but many vagrants whose lives are little known, are employed.

In this district are a few, who are in search of heaven by the route pointed out by Kamal, who is said to have been son of Kavir or Ramananda. In this district there is only one Akhara in the division of Lokmanpur, and the owner has not one adherent; but some vagrants come to other parts, and instruct those who are desirous.

In this district there are a few worshippers of Vishnu of the school (Samprada) of Sanak, who are called Nimayits, as I have mentioned in my account of Puraniya. There are three Akharas, the inhabitants of which have rejected pleasure, and 18 men who have embraced the sex in wedlock. All of these instruct the people in the doctrine of Vishnu Swami.

The sect of Siva Narayan, of which I never before heard, say that this person was born as a Narayani Rajput of Sesana, three or four days journey west from Gazipur. He set up as an incarnation of God, and he called those, who adopted his doctrines, Santas (pious), and does not seem to have established any hierarchy. Though dead, he is still called Guru, and his three sons are only called Santas, but are highly respected. He wrote several books, Gurunyas Santakari, Santabilas, Santaupades, Santa-parwana, Santasundar, Santasagar, Santa Mahima, &c. The Gurunyas contains the first, and most essential doctrines, and is that in most common use. It is written in the vulgar language of the country, where the Guru lived. A little Sangskrita is intermixed. The sect seems to have been propagated by these books distributed among those who can read, who explain them to those who cannot, and the principal agent seems to have been Rokhanram, a Rajput at Barsundi near Gazipur, who was a very intelligent person. Many go to him for advice, and he receives presents. The sons of Guru seem occasionally to travel, in attempting to explain the doctrine of their father. My informant, Bechuram, is the most intelligent man at Munger of this sect. He pretends to no superiority over the other Santas of the place ; but every year all the sect assemble at his house on the Basantapangchami, and bring presents. A copy of the book is produced, and part of it read. Then it is laid down and receives offerings of flowers, red starch, betel, and sweetmeats. The whole is thus consecrated, and divided among the assembly. Occasionally, at different times, two or three people assemble, but at no fixed times, and present offerings in the same manner to the book, and hear it read. The Santas ought to acknowledge no God, except Sivanarayan ; but many ignorant persons cannot be persuaded to abstain from the

worship of destructive spirits, in cases of danger, especially if their wives adhere to the old doctrines. They consider that Sivanarayan is omnipresent, and always existed, and that his appearance on earth lately was an incarnation for the instruction of mankind. All persons, who are not Santas, will undergo transmigration ; all the good Santas go to Santades, or the abode of the pious, but bad men, although believers, will be born again. They employ Brahman Purohits to perform the ceremonies at marriages, funerals, and births ; but merely in compliance with the custom of the country. Every Santa observes the rules of the caste, to which he formerly belonged, and continues to intermarry with infidels. They do not attempt to instruct the low castes, and they cannot admit Moslems, because these, having lost their own religion, would have no caste, and no one would associate with them ; but there seems to be no absolute law against admitting proselytes of any kind. When I asked for a copy of his book, the poor man seemed to think that he had made a convert. It is said that in the vicinity of Banaras there are many Santas, especially among the military tribes.

The priests, who officiate in temples, are in Magadha called Panda, a title, that in the south of India seems confined to the Sudras, who officiate in the temples of Siva. The profession here is not considered as honourable for the sacred order ; but less disgrace attends it in Magadha than usual, and the Pandas are not excluded from intermarriage with the highest families. In some parts the Zemindars take a share of the profits, which the priests receive : and there are temples, which have endowments, and have no priests. There the Zemindar keeps a clerk, and takes the whole profit.

The young Brahmans usually pass four days in the state of Brahmachari, before they assume the thread. During this time they eat only once a day, abstain from salt, oil and animal food, and study forms of prayer.

No Brahman of this district, so far as is known, has become a hermit, nor has any one gone to Kasi to become a Gymnosophist. I saw a fellow on the rock near Sultan-gunj, who had reduced himself to this state, and was a most impudent and saucy beggar ; but he was not of the

sacred order, and I was happy to learn from himself that the people treated him with neglect.

In some caves dug into the rock at Patharghat five or six Tapaswis or penitents have taken up their abode. They are strangers, and sit constantly in their dens feeding on what is given to them without solicitation. It is supposed, that they often want for a day or two at a time; but, when I saw them, they appeared to be in tolerable case.

Two or three old women, one of whom formerly followed the camp, have dedicated themselves to God, and are called Vaishnavis, have procured some images, called their houses Akharas, and give instruction (Upades) to sundry persons, who worship Ram. One of them at Sibgunj, has taken the title of Mahantini.

No women of this district have become Avadhutinis; but mendicants of this kind occasionally come.

In the part of this district, that belongs to Behar, there are no Dols, like those of Bengal.

The purity of caste, among the high tribes, is preserved by assemblies (Pangchayat), in which all the members are equal. Among the lower tribes there are chiefs called Serdars, Chaudhuris, Mehturs, or Mangjauns. The office is usually hereditary but on complaint from his dependents they are changed by any person in power, such as the Zemindar, Tahasildar, or Darogah, who procures an order from the magistrate, who, if he chooses, confirms the change. Widows sometimes succeed to the offices of their husbands. The people under each chief are called a Chatayi, as all sitting on the same mat, an honour which they forfeit by acting contrary to the rules of caste; but the authority of these chiefs is not confined to matters of caste alone. No man will enter into any engagement to perform work without the order of his chief, who thus makes a monopoly, in the true spirit of corporation. The chief cannot excommunicate without the consent of the principal persons of his Chatayi. The chief receives a commission on the wages given by persons of rank to the labourers, whom he has furnished, and has the chief share in the feasts which are given at purifications. Under the chief is a person called the Barik, who receives the fines for transgressions, and with them purchases the

feast. On dividing this, if there are any remains, he takes them to himself; if there is a deficiency, he must furnish it from his own house. Some of the Baniyas, and all the inferior castes have chiefs.

Among all Hindus, wherever an animal of the cow kind dies by accident, such as by fire, by the bite of a serpent, or the like, or, if the beast dies when tied in the house, or to a post, the master of the animal incurs sin, and must perform a ceremony of purification (Prayaschitta). Certain Brahmans, skilled in the law, point out the ceremonies proper to be performed, according to the nature of the case; and, in some parts of the district, the Zemindars have appointed certain Brahmans for the purpose, and no others are allowed to give their advice, or rather to issue their orders.

### Of several small sects

I have nothing new to add to the account of the Sikhs given when treating of Puraniya. Ten unmarried men and 16 married have Sanggats, and instruct the people of this district; but many mendicants intrude, and diminish their influence. None of the Sanggats are of great importance, One at Bhagalpur, and one at Munger are the largest.

I heard of one unmarried and two married men who are called Sutrashahis, who are said to belong to the sect of Nanak, and to be mendicants who commit sundry extravagances, but I have procured no information concerning them on which I can depend.

In my account of the Kotwali I have said all concerning the Jain that I learned. This district is not frequented by the merchants of that sect except in pilgrimage.

At Bhagalpur is a small church belonging to the papists, and about 50 christians of that persuasion.

Half of them are descendants of Portugese, and the others are native converts, who retain their own dress, and language. The priest is a native of Milan, sent by the Societas de propaganda fide; and, so far as I could judge from a short interview, was a man of decent manners and education. He has charge also of the flock in Puraniya, amounting, as he says, to about 40 persons.

I have since learned that in the wilds of the Ramgar district there is a tribe called Parahiya, which speaks a language totally different from the Hindi, and retains manners considered by the Hindus as quite barbarous; and I think it probable from the resemblance of names that the Parighars and Parahiyas may originally have been the same

BOOK III.  
OF THE NATURAL PRODUCTIONS OF THE DISTRICT  
OF  
**BHAGALPUR.**  
CHAPTER 1ST.  
OF THE ANIMALS.

The most common monkey in this district, and the most destructive of the wild quadrupeds, or rather as the French naturalists say, of the wild four handed animals, is the Hanuman. This animal seems confined to certain territories in a manner, for which I cannot well account. On the north side of the Ganges there are none, which occasions no difficulty, as the river is too wide for them to cross; but, although they are numerous in almost every wood in the district, and are exceedingly common in the town of Bhagalpur, there are scarcely any in Rajmahal or the low country S. E. from it, nor are there any in Mungger, Suryagarha, or the adjacent villages. There seems to be nothing in the situation of these places, that can occasion the difference. I presume, therefore, that the people of Rajmahal, Mungger, etc., resist the incursions of these destructive animals with more vigour than the consciences of the people of Bhagalpur, and of other sufferers would admit. The people of Mungger, indeed, deny their using any force or violence, and pretend, that when a Hanuman comes to invade their property, they merely make a noise, and use threats, but this I have seen tried very often with no effect, and I have no doubt, that more severity is used, but this is looked upon by so many as sinful, that the poor people, who defend their property, are afraid to avow their industry

I have also no doubt, that a very moderate exertion of violence might altogether expel these pests, and the havoc, which at present they commit on the crops, is very great. To destroy one of them is considered almost as great a sin as to kill a cow; and moreover it is imagined, that such an action is exceedingly unlucky, and that where a Hanuman has been killed all the people will soon die. His bones also are exceedingly unfortunate, and no house built, where one is hid under ground, can thrive. The discovery of these bones, or the ascertaining that none such are concealed, where a house is to be built, is one of the employments of the Jyotish philosophers of India, so highly vaunted for the purity of their science. It is perhaps owing to this fear of ill luck, that no native will acknowledge his having seen a dead Hanuman; for it can scarcely be supposed that the animals conceal their dead, as many of the natives suppose. In the town of Bhagalpur and some villages they are far from being shy, but have no sort of tameness, and in the woods they are very noisy, but shy, so that when in the forests, you hear them constantly, and only occasionally are able to discover a herd. They always go in considerable numbers.

The short-tailed monkey, already mentioned in my accounts of the preceding districts, is in this also pretty common, on both sides of the Ganges, and in the western parts is most usually called Ratuya. It is not so destructive as the Hanuman, because its death is not nearly so sinful, and it is not therefore allowed to take the same liberties. Its bones are as unlucky as those of the Hanuman; and people who have long frequented the woods have no more seen a dead Ratuya than a dead Hanuman.

The black bear of India (Bhal) is found in all the woods of this district on the south of the Ganges; but, except towards the southern boundary, is not very numerous, and does little harm. Sometimes, however, the bears kill a man; but they never attack cattle.

The *Ursus indicus* of Shaw is found on the hills south from Mungger, where it lives in holes under large stones or rocks. It is called Bajrabhai, or hard bear, because it may be beaten very much without being killed. These animals live in pairs or families,

and eat frogs, rats, white-ants, and other insects, for which they dig. The people here have never seen this animal digging up graves, nor eating dead carcases, as I formerly heard was its usual custom.

In this district the Indian ichneumon or Biji, is pretty common, and undoubtedly kills, and eats serpents, on which account it deserves the utmost protection. Had Hindu fable been directed to such a laudable purpose, it would have merited some excuse; but in general its object seems to have been to recommend whatever is useless, and often what is prejudicial. Otters are in most parts scarce, and no one is employed to collect their skins. On the banks of the Ganges there are many. The natives at Kodwar imagine that before it begins to eat, this animal collects small fish in a heap; and if disturbed while eating, that it urines on the heap. Immediately such crowds of insects swarm on the fish that they become totally useless for man. I have had no opportunity of tracing what foundation there may be for this story.

The tiger or Selavagh in this district is pretty common, but it cannot be said to be very destructive. It is not beasts of prey that are most prejudicial to mankind. Those which attack the sources of subsistence, such as monkeys, hogs, deer and elephants, do much more harm. I am indeed persuaded, that the tigers, by destroying hogs and deer, do more good than harm, at least in a district where the two latter animals are so numerous and destructive.

Of the two large spotted animals of the feline genus that are common in India, and which I suppose to be the *Felis Leopardus* and *Felis Jubata* of zoologists, I saw only the former, and the natives apply the name of Chita-vagh, and other appellations, such as Chitraka and Doyalija, so indiscriminately to both, that it is impossible to say whether or not the other kind is to be found. So indistinct in nomenclature are the natives that at Mungger the leopard was brought to me as the Lakra-vagh, the name by which in Bangka and almost everywhere else the Hyaena is known.

The Harvagha or Harak derives its name from eating bones, for it possesses so little swiftness that it

cannot overtake any living animal. It is said to resemble in size the spotted tiger or leopard ; but it has about the loins a peculiar weakness, to which its want of swiftness is attributed, and it is striped like a tiger, not spotted like a leopard. It was said not to be uncommon in the southern parts of the district, where it remains the whole year ; but, although I have offered ample rewards I have not been able to procure a specimen dead or alive. It is a solitary animal, and breeds in the month Bhadra, that is, from about the middle of August to the middle of September. Although the natives usually call this animal a Vagh, which name they give to the tiger and other large animals of the feline genus, we cannot infer from thence that it belongs to this tribe, for under the term Vagh they include the Hyaena, or in fact perhaps every large beast of prey. There is some reason to suspect that this Harvagha is infact the Hyaena, although in Lakardewani the Lakra-vagh or Hyaena and the Harak were stated as distinct animals, and as I have mentioned, the Leopard at Munger is called Lakra-vagh.

The Hyaena or Lakra-vagh in this district has acquired an uncommon degree of ferocity, is said to carry off goats, calves, and sometimes even children ; for it is a bold animal, and enters villages at night, which tigers or leopards seldom do, at least with an intention of attacking the human species.

The Kohiya, although I have never been able to procure a specimen, is undoubtedly an animal of the canine genus, of which I have heard reports from a great variety of places in India, and have been favoured with some drawings. It frequents the southern parts of the district ; but does not breed there, nor does it come every year. It usually appears in February, coming in packs of from fifteen to twenty, and hunts in company. On its arrival, all other wild animals instantly fly for it attacks even the tiger without fear, and is supposed to fly immediately at his eyes. It is, the natives say, like a dog, but longer in shape, has a black muzzle, and is of a red colour, without spots. The Kohiya occasionally kills calves, taking them to be deer, which are its favourite food ; but the good which it does in driving away other wild animals, is ample compensation. Such

is all the information that I have been here able to procure concerning this animal, which I suspect is the real *canis aureus*, or according to Buffon, the *pantheros*, of the ancients ; while our jackal, which has in its colour nothing red, or still less golden, seems to be the *adive* of the great naturalist of France, a name which in the dialect of Karnata merely implies anything wild.

This jackal in some parts of the district, especially in the part which is included in Gaur, is more numerous and noisy than I have any where else observed. It is not only during night that one is there annoyed by their dismal and discordant howlings, but in the very midst of day they are exceedingly noisy. This gave me an opportunity of ascertaining that it is this animal which makes the howl, resembling somewhat the word Phao, concerning which the natives are very much divided, some asserting that this noise is made by the jackal, while others allege that it is the voice of the fox. The natives allege, that the jackal is most noisy at the end of every watch (Pahar) of the night ; and so far it may be allowed, that for a little they usually set up a general howl, and then for some time continue silent. So indistinct is the native nomenclature, that in Bengal this wretched animal and the powerful royal tiger are often called by the same name, Siyal. When the growling of a tiger is heard at night, a Bengalese will not say that it is the roar of a tiger, lest the animal should instantly rush in and devour him ; at night he always speaks of the tiger by the name Siyal ; and it is only in the day that he ventures to call the animal a Vagh. The jackals, called Gidar in the Hindi dialect, are accused of being great thieves, and of carrying away clothes, money, and many other things, for which they can have no use. The fact, I believe, is, that they sometimes carry away parcels, thinking that they contain food. At Phutkipur, a bag belonging to one of my servants, was taken out of his tent, and in the morning its contents were found scattered about at a little distance. This was attributed to the jackals, and perhaps with reason, as a thief would probably have carried away the articles, which were wearing apparel. The wolf (Hundar) is said to be some-

times but rarely seen in this district. It is an animal of which I have never been able to procure a specimen, nor do I know whether it is of the same species with the wolf of Europe.

The Indian fox (*canis Bengalensis*, Pennant) is very common, and is a pretty, harmless creature. In the Hindi dialect it is called Khikir, apparently from one of its calls.

In some parts of the district, as Tarapur, the people talk of a beast of prey called Patlegri. They say that it is small but very fierce, and that in the night it occasionally sits on the roof of a hut, springs on those coming out of the door, and puts them to death. I strongly suspect that this is fabulous, and invented to prevent young people from gadding at improper hours.

According to the report of the natives, all these beasts of prey may annually kill 20 people, and 250 head of cattle.

The porcupine, called here Sahi, is not very common, which seems to be partly owing to its being eagerly sought after by many who eat it, and partly to the soil being too stiff. In the hills it is more common than on the plains, and finds shelter under large stones and rocks.

The Indian hare (Khurgosh), is much more common, although a good many are killed for eating. In general, however, the natives seem to give a decided preference to the porcupine, although both are admitted to be pure food. In every part of the district the small striped squirrel (Gilhari Lukkhi or Kat Biral) is very common.

The *Sciurus Indicus* of naturalists is not uncommon in the woods of Mungger, where it is called Rato. Except when breeding, it is a solitary animal.

In the southern part of the district I heard of another squirrel called the Ban Biral, which was said to be larger than the common palm squirrel (Kat Biral) and to be of a whitish or pale yellow colour, but I could procure no specimen, and on subjects of this kind the natives in general speak so indistinctly that little reliance can be placed on what they say; and others allege that the Ban Biral is a wild animal of the cat kind, that kills hares, peacocks and large birds.

The animal of which the natives are by far the most afraid, and to which they attribute their having deserted many villages, is the elephant. This animal is, however, confined to two parts. The greatest number frequents the Rajmahal hills and their vicinity, and it is said, that it is within these 30 or 40 last years that the wild elephants have made their appearance. The stock is said to have been some that made their escape from the Nawab's stud, which is often sent for forage to the vicinity of Rajmahal. So far as I can learn, there may be in all 100 head, partly on the east, and partly on the west side of this range of hills. From the latter, small herds sometimes make excursions so far as the hills south from Mungger ; but this is not usual, and hitherto these animals have in general confined their depredations to within seven or eight coss of the Rajmahal hills.

The natives, I am persuaded, greatly exaggerate the injury done by these animals ; but there can be no doubt, that these herds are chiefly fed on the crops ; for in many woods frequented by the elephants there is scarcely any forage that they will eat. Palms, ratans, scitamineous plants, bamboos, reeds, and marsh grass, are there very scarce, nor are the fig-trees, which the elephants eat, common anywhere except near villages. It seems therefore surprising that the elephants have not entirely resorted to the western hills, where the bamboo is very abundant, and where in some places there is a tree called Galgal, of which they are said to be fond. This circumstance, in my opinion, shows that the elephant is not an adventurous animal, and might be easily repelled. The Company allows land in these very parts for supporting upwards of 2500 armed men, who are supposed to be necessary for checking the incursions of the mountaineers. For that purpose, as I have said, they are little if at all required, but were they capable of attacking the wild elephant, their services might be of the greatest use, until these animals were exterminated. I mentioned to many of them, as well as to the zemindars, the propriety of such an attack, but both parties agreed in stating that for such men the exploit would be by far too dangerous ; from whence we may judge of how little use such a body really is. In fact, a great many of them are armed only

with bows or swords, and the ball of the matchlocks which a few have is too small. Still however they would do some good, and if parties of the hill crops were sent to different places for a general hunt, these armed rabble might be of great use, in attending the regulars to procure intelligence and supplies ; and I have no doubt that in two or three years the whole of these destructive animals might be killed. The presence of an European officer with each party of 20 or 30 sepoy's would be of the utmost advantage ; and the hunt would, in fact, be a good military exercise for the party employed. The whole expense should of course be levied from the Zemindars, whose lands are liable to be injured by the elephant, first offering the alternative of their undertaking to destroy the animals by their own means. If some such exertion is not made, there can be no doubt that the elephants will rapidly increase, and extend their depredations all over the district.

The alarm that they occasion is exceedingly great. One night that I lay close by the hills, although I had a guard, the men of the village close by my tents retired at night to trees, and the women hid themselves among the cattle, leaving their huts a prey to the elephants, who know very well where to look for grain. Two nights before some of them had unroofed a hut in the village, and had eaten up all the grain, which a poor family had preserved in its earthen store (Kuthi).

On the north side of the river, a colony of elephants, similar to that in the southern parts of Puraniya, frequented the marshy woods of that part, and occasioned an equal alarm. Dular Singha Chaudhuri of Puraniya, whose activity I have had already occasion to praise, having purchased an estate there, found it in a great measure deserted, and the principal reason assigned was the destruction occasioned by the elephants. Although Dular Singha probably knew very well of much stronger reasons, he did not neglect this, and brought from Silhat four elephants trained to catch the wild. With these he soon caught seven, and the few that remain on that side of the river have left his estate and its immediate vicinity, and have retired to where the owners are usual totally helpless.

This method might no doubt be pursued with success by the other zemindars, but I imagine it would prove more expensive than the killing the animals with muskets. If the creatures could indeed be preserved, their value would in some measure compensate the expense, but of the seven taken by Dular Singha I understand that only one survived the loss of freedom. In fact the casualties among elephants taken by a noose are always very numerous, and here it would be impossible to form a Khada. Nor can this last method of catching elephants be employed so as to free a country entirely from their depredations.

In most of the wild parts of the district, the rhinoceros is occasionally but very rarely seen. Formerly, in the marshes at the foot of the hills between Rajmahal and Sakarigali, there were many, and even now there are always some, but they have been so much disturbed by European sportsmen, that they have become scarce, and exceedingly shy. They never did much harm. In almost every part of the district wild hogs are to be found, and even in Mungger, its best cultivated part, they have been known to come into the fort; but in general they are neither numerous nor very destructive; and are worst on the north side of the Ganges. In the wilder parts they seem to be kept within bounds by the number of persons of low birth, who take a delight in hunting them on account of their unclean flesh.

The Indian term Harin, is difficult to explain. It includes not only the Moschus, Antelope, and Cervue of European zoologists, but also a wild species of the Bos, while it excludes the wild buffalo. While such a vague generic term has been chosen, we need not wonder at difficulties concerning the specific appellations; and in fact I scarcely have met with two people, even in the same vicinity, that agreed on this subject, and at little distances the nomenclature is totally at variance. I shall proceed therefore to mention the animals which I could ascertain to exist, with such names as I heard given to them. I heard of many other names, but so vaguely employed that it is impossible to say whether or not they belong to the same animals.

The *Moschus Memina* of the zoologists is a pretty little animal, not much larger than a hare. Among the

hills south from Mungger it is not uncommon and is there called Jethi-harin. Intermediate between the *Moschus* and *Cervus*, as having the tusks of the one, and the horns of the other, is the rib-faced deer of Pennant, which is pretty common among the hills, and is called Sogra. In Kodwar I heard of a small deer named Kurangga, and suspect that it is the same.

The *Cervus axis* in many parts is exceedingly common and destructive. It is perhaps the finest of the deer kind, not only on account of its beauty, but of the facility which it is tamed. Chitra, the name most commonly given to it, is derived from its spots, but there is reason to think that the porcine deer, when young, is often called by the same name, and this animal, although I did not see it, is said to be common in the district. Neither did I see either variety of the stag, although it can be scarcely doubted that both exist, for the people of Lokmanpur say that they have a deer with branched horns, and larger than the spotted deer, which latter they call Phateka-harin. The male of this large kind is called Jangha, the female Pora. The Lokna Lokni of the same division I take to be the Porcine deer.

A very beautiful animal of the Genus Antelope, called Ghoraroj, is pretty numerous. It is found in all the woods of the southern parts of the district, and goes in small herds or families. It resembles very much the Nilgayi, or *Antilope picta*, and may perhaps be considered as a mere variety of that fine animal; but it is much the colour of the stag, and grows to the size of a small horse. From its make, it would appear to possess both great strength and agility, and its shape, carriage, and motions are graceful. I have some suspicion that it is the antelope *Tragocamelus* of Gmelin, although in all points it does not agree with the character which he gives of that species; but except the Nilgayi, if really different from that, it is the only large Indian species of that tribe of which I have heard. It would appear to breed at no particular season, as three young, which I procured, and all alleged to be under a year old, were of very different growths.

The *Antelope Cervicapra* is the wild quadruped of which I saw the greatest number in this district, but

that probably was owing to its frequenting open naked plains, while the deer and hogs, in the day at least, usually conceal themselves in woods and thickets. It goes in small herds of from three to seven. I have not observed more than one male with a herd, but I have sometimes seen solitary males hovering around. I suspect that the males, so soon as they become fit for procreation, fight until only one remains alive, or at least until all the weaker competitors are compelled to retire from the herd. It seems difficult to account for the bounding which this animal uses in running, when not hard pursued ; for it very much impedes their progress, must be very fatiguing, and seems to be totally useless. I at one time thought, that it might be with a view of enabling the animal to see if any enemy was concealed behind bushes or other cover ; but I have observed them to use this manner of advancing when on exceeding bare plains. In Kodwar, where they are most numerous, the male is called Chamungga, and the female Bareta or Guriya.

Along with musks deer and antelopes, under the generic name of Harin, the natives class an animal of the genus *Bos*, which in the Hindi dialect is called Gaul or Gaur Harin, and in the Bengalese Gyal Harin. I could procure no specimen, except a pair of horns without the skull, so that concerning this animal I cannot speak with certainty farther than that it is evidently of the Genus *Bos*. The horns have a strong resemblance to those of the Gyal of Chatigang, Tripura and other eastern parts of Bengal. There are however slight differences, and the manners of the animals are said to be different. The Gaur is represented as extraordinarily fierce and untameable, which is by no means the case with the Gyal of Chatigang ; but I have heard from Mr. Maera, surgeon there, that in the eastern woods an animal resembling the Gyal, only of extraordinary ferocity, has been sometimes found. The Gaur is said to be about the size of a buffalo, and in this district is rare ; but in all the wilder parts of the south it is occasionally seen.

In this district the wild buffalo, so common in the eastern parts of Bengal, is scarcely known. One or two are occasionally seen on the north side of the river or in

the eastern corner. No native of this district, it was alleged, makes hunting a sole profession ; but the men of the hill tribes pass a great deal of their time in this exercise, partly from the love of sport, and partly to supply themselves with food. The boar, deer, antelope and porcupine are their common objects of pursuit, and the bow and arrow their usual implement. The arrows are in general poisoned with the root brought from Nepal. Some of the ruder tribes towards the south use the same means ; but in most places the farmers have nets, with which they take these animals ; and hares are so abundant, that they are knocked down with sticks, although they also are often caught in nets. In many places dogs are trained to drive the wild animals from their cover, and in a few the matchlock is used in their destruction. On the north side of the river it is in the rainy season chiefly, that the farmers hunt. The animals then are often so surrounded by water, that even tigers fall an easy prey. It must be observed that at Bhagalpur there are professed hunters, who kill tigers for the reward offered by Government, but they allege that their families are in Dinajpur, and that they come to Bhagalpur in the cold season only. In Dinajpur I heard of no such people, and for some reason which I cannot exactly assign, the abode of such persons seems to be always concealed. They are perhaps in general thieves. I employed two of them for a month, giving them muskets and ammunition, and they had spring bows, but except one Hyaena they did not bring me any animal. Near Munger again are 40 of the Bindu caste, who shoot tigers, bears, antelopes, hogs and hares, and sometimes catch hares and the small moschees with nets. They shoot also peacocks, wild poultry, and some other kinds of game. The town affording a market, they sometimes bring their game for sale, but I imagine that the quantity which they procure is very trifling. I have found them a people difficult to manage, and have been able to procure scarcely anything through their means. Their principal occupation is cultivation, and that of their women collecting herbs for the druggist, on which subject also I find them altogether reserved.

In the Ganges Porpoises are exceedingly numerous

and are occasionally caught in the fishermen's nets, and their oil is used for the lamp, but there are here none of these who make a profession of striking them.

I have little to add to what I have formerly said concerning birds in my account of Ronggopur, much of what I have said there being applicable to this district.

Birds of prey are numerous, but do little harm, carrion and wild animals giving them a copious supply of food. The Nawab at Rajmahal, Raja Kader Ali, and the Raja of Gidhaur keep tame hawks for sport, and employ the men called Mirshekars to train and feed them, but none fit for sport are bred in the district. They are procured from the northern mountains. Falconry is the proper employment of this class of men, who in general are Muhammedans. As hawking, however, seems to be on the decline, some of these men employ their rod dipped in bird lime to catch birds for eating, or shoot them with small shot; and sometimes they deal in small singing birds part of which, however, they catch with nets. The Europeans are those who buy most of the former, ducks, teals, snipes, and the Bageri lark or Indian ortolan; but in some places we heard that partridges and quails were caught and fattened by the natives for their own eating. I never, however, could procure a sight of any such.

The small singing birds which the Mirshekars catch with nets, are chiefly as follows; the Tuti, a *Loxia*, of which the male is called Sorukh, and the female Sophedi; the Sarbabaya, another *Loxia* which may be that called *bengalensis* by Latham; the Sinchbaz (*Loxia punctularia* L.) the Naklol (*Loxia Malacca* L.) and the Pidri, which is probably the *Loxia malabarica*, although in some points it differs from the account given by Latham. All these birds usually go in the same flock, frequenting the reeds and tamarisks which grow on the banks of the river. They also take the Lal, (*Fringilla amandava* L.) which lives in the same places, but always forms separate flocks, although its manners and shape are nearly the same. The same people also catch with bird lime the Sam Dahiyal (*Sturnus vulgaris*) the Pidda, a bird which comes nearer to the *Graeula saularis* of

Latham than to any other that I know, but I suspect that its female may be the *Muscicapa lucionensis*, the Dahiyal (*Gracula saularis*) the Kangdra (*Lanius jocosus L.*) the Kala bolbol (*Turdus cafer*) the Dama (*Turdus citrinus L.*) the Golabi Mayna (*Turdus roscus L.*) the Gang Mayna (*Turdus gingianus*) the Matiya-Pawai (*Turdus malabaricus*) and the Chungtiya Pawai (*Turdus pagodarum L. varietas*). The following are sometimes caught with the rod, but more commonly the young are taken from the nets : the Aggin, a lark very much resembling the *Alauda arvensis* of Latham, but it is considerably smaller, and its note not so strong as that of the skylark of Europe ; its manners are very similar ; the Chandul is a crested lark, which agrees very well with the descriptions of the *Alauda senegallensis*, but the reddish colour is less conspicuous than on the bird of Africa ; and the Ghotauli, which is a kind of intermediate between the finches and thick-billed larks.

Some farmers of the hills take from the nets the following birds : the Sama (*Turdus macrourus L.*) the Kanrha Harewa, a species of *Merops* and the Suhiya Harewa, I presume another species of *Merops*. The most curious bird which these people bring is the Sabozlal, or *Fringilla formosa L.*, which is very rare. A pair brought this year from Gidhaur was valued at twenty rupees. The men of the low tribe Kondiya catch birds for their own eating, by a spike at the end of a jointed rod, nor do they seem to reject any species, which they can secure. For sale they also collect the young of the Tetia, Furidi, and Chandana, all of which Parakeets have been mentioned in my account of Puraniya.

At Mungger are five merchants who purchase these birds from the abovementioned people. They sell a few to the boats that are passing, but carry the greatest part to Calcutta on their own account. Two boats usually are sent in the year, in June and October. In both birds, to the value of 500 R. may be sent. About 500 birds of sorts, and 1000 Amandavas or Lal may go in each boat. Considering the expense and deaths, the profit cannot be very great.

The birds that are most destructive to the crops are the Crane, Parakeet and Peacock. The latter is exceed-

ingly numerous, and is a great object with the Kondiyas, as it is good eating, and they can sell the feathers. During the fair season no less than 100 of these people are supposed to frequent Gogri alone.

The people do not seem to pay so much attention to watching their crops as in Ronggopur, but whether that proceeds from the destructive animals being less numerous, or from indolence, or from both, I cannot exactly say. Where there is danger, rich people usually hire some low families to build a shed, in which they pass the night, and make a noise ; small farmers do this themselves, and in some places Dosads or watchmen belong to the village establishment, and watch the crops, but in others the Dosads only guard against thieves. Watchmen, when hired, usually get from 5 to 10 Dhur a bigah of the produce ; the latter is  $1/40$  part, the former  $1/80$ .

Near the Ganges, and in the larger of its branches on the north side, tortoises are very numerous ; they are caught by the common fishermen and are saleable, but except among the lower tribes are in little request. Some are sent from Rajmahal to Murshedabad, and to the mountaineers. At Munger there are reckoned seven kinds. 1st, Singgiya, which is said to grow to between five and six feet in length ; 2d, Kataha which grows to about two feet in length ; 3rd, Dhongr, grows to about a cubit in length; 4th, Sutli, is about seven or eight inches long ; 5th, Bhitaha is about the same size ; 6th, Sinduriya, is about four or five inches long ; 7th, Marha is about the same size. All these tortoises lay their eggs in the sand, digging a hole for the purpose, and covering them with sand. The season is from about the 1st of March to the middle of April. On other occasions the whole continue always in the river, except the Kataha, which occasionally during the afternoon basks on the shore. They are supposed to feed chiefly on fish ; but they are also thought to eat shell-fish, the reed called Kosala, the roots of which are inundated, and mud. Their eating the Kosala appears to me doubtful ; and what the natives mean by eating mud, must have arisen from their having seen these animal searching among the mud, for worms, snails, or such like animal.

Lizards are not in request.

Crocodiles, both of the Ghariyal and Boch kinds are numerous in the Ganges, and still more so in the Tilyuga. They are occasionally caught in the fishermen's nets, but are not intentionally molested, except on the north side of the Ganges, where the low tribe Musahar pursue them with spikes, and extract the oil. The Ghariyal when caught, is eaten by the fishermen, as well as by the Musahar, but by no others. The Boch is rejected by all. Some invalids, whom it was attempted to settle on the banks of the Tilyuga, assigned the number of crocodiles as a reason for having deserted their lands; but I did not hear that in the whole district these animals had ever destroyed man or beast. I have however heard of the Boch having bitten people very severely. In one tank I heard of their being tamed to a certain degree, as mentioned in my account of Puraniya.

Serpents are certainly more numerous and destructive than in any of the divisions hitherto surveyed, and it was alleged, that annually from 180 to 200 persons are killed by their bites. The Maler on a hill near Paingtî shewed me a hole in a rock, opening into a hollow space close by the path leading up to their village. They said, that this hole was the abode of a very large serpent, which they considered as a kind of god. In cold weather they never saw it; but in the hot season it frequently was observed lying in the hollow before its den. The people pass it without any apprehensions, thinking that it understands their language, and would on no account injure a Maler, should even a child or drunken person fall upon it. The animal is said to be almost as thick as the body of a man, and is exceedingly slothful. How it procures food, the people cannot say; but they think that it eats deer and hogs. Several such serpents were said by the chief of the village to be in other parts of the hills belonging to this tribe, but several persons that I afterwards spoke with on the subject had never heard of them.

In the interior of the country south from the Ganges, fish are very scarce; the rivers, for a great part of the year, are almost dry, and there are few marshes, ponds, or lakes. In the rainy season, however, a few

are generated, and are mostly caught by the farmers, as the waters dry up. Near the Ganges again, and especially near the Tilyuga or Ghagri, on the north side of the great river, there is a great abundance of fish; but during the floods, owing to the want of skill in the fishermen, the supply is everywhere scanty; and at Bhagalpur, owing probably to some defect in the police, the scarcity prevails at all seasons, while at Munger and Rajmahal, not more favourably situated, the supply during the dry season is uncommonly copious, and the quality tolerable.

Some fish are dried, and sent to the interior, and to the adjacent hilly parts of the Virbhumi district; near the Ganges this kind of food is not in request; nor do the people there prepare the balls called Sidul, formerly mentioned. A large proportion of the fish used is far advanced in putrescence before eaten. Rahu, Katla and Mrigal, being sent to Murshedabad in considerable quantity, sell about one-fourth dearer than the other kinds. In the dry season these valuable species sell at Munger, for from  $2\frac{1}{2}$  to 3 paryas a ser of 84 S. W. (about  $2\frac{1}{4}$  pound), 64 paryas being equal to a rupee.

There seems to be an uncommon alarm on the subject of the fisheries, so that I could procure no satisfactory account either of the number of men employed, of the nature of the tenures, of the means used, or even of the kinds caught. It was with great difficulty that I could induce two men to enter my service, in order to bring me the different kinds, and they made so little exertion, and spoke so confusedly on the subject, that my list is exceedingly incomplete. The aversion shown by the owners and managers of the fisheries proceeds, I suspect, either from deficiencies of title, or consciousness of fraud.

A great many of the fishermen employed on the Ganges belong to the Puraniya district. When there I was led to suppose that the fishermen on that river were as expert as on the Mahananda, but here this is altogether denied, and it is alleged that there are very few indeed who can take fish in the stream of the great river, and these mostly strangers. It is said that even the stream of the Tilyuga or Ghagri, in its most reduced state, is

unfit for the fishermen of this district, and that they are only successful in Jhils or shallow lakes, and in what is called Kol or Damas, that is, branches of rivers in which during the dry season the communication with the stream is cut off at one, or at both, end. In the former case a net or screen stops the passage, and thus the fish are in a great measure caught as they are left dry, or at least when the assistance of a boat is not required in surrounding them with nets or screens (Janggha). I am, as I have said, exceedingly doubtful concerning the reports which I heard on this subject, but an account of the nets used at Mungger will show that the fishermen are not so ignorant as they pretend.

Some of the Banpar Gongrhis at Mungger are said to strike large fish with the Gig (Dukti) which is chiefly done in the floods. Some Kewats called Dubaru or Divers are said to pursue fish under water with a spear, and I was gravely assured both at Suryagarha and Mungger, that these men could continue under water a Hindu hour (24 minutes), but two men, that I tried at Mungger, did not complete one minute, although one of them brought up a prawn.

In some small rivers that have a supply from the hills, as the waters fall in the cold season, I saw in use weirs somewhat like those employed in the small rivers of the Eastern parts of the Ronggopur district.

A great portion of the fisheries has been separated from the property of the land by which they are surrounded, and even where the landlord has the right of the fisheries situated within his estate, the tax on the two properties is kept distinct. The greatest fishing, that at Rajmahal, mentioned in the account of Puraniya as belonging to a lady, now belongs to Government. The owner having fallen into arrears, the estate was put up to sale, and no one offering, the Collector took it as usual. It has been since farmed to a Moslem, who it is said pays only R. 1001 a year, and who, it is pretended, loses by his bargain, but how this should be the case seems difficult to be understood. Some few privileged fishermen have a right to fish in certain places for a certain small sum (3 or 4 R.) annually, but if they go to any other

place, as is usually the case, they give a share, and by far the greater part of the fish is caught by those who gave the renter or his agents one half of all that they take, and the quantity taken in this fishery must be exceedingly great. Another great fishery in the same vicinity, but farther down, is called Dihi-Mirzapur, and includes what is called the Ganggapanth, or the fishery on the Ganges with all its creeks and branches. On the small Bhagirathi it extends from Jungipur to Mohangunj, about nine coses, and on the great river it includes from Radhanagar to Kandra-Govindapur about fourteen coses; 500 families have leases in perpetuity to use this fishery, but most of them reside in Puraniya, Dinajpur, and Nator, and they seem in some measure to be *adscripti aquis*, as it is alleged that were they to remove even to Dhaka they would still continue liable for the rent. For each family this varies from  $\frac{1}{2}$  to 3 rupees a year not according to its present strength, but according to its state when the lease was granted. These people have the exclusive privilege of using the fishery of the Ganggapanth, wherever the stream runs, but this is chiefly used in the rainy season, and in the dry the fish are mostly caught in the branches and creeks (Kol, Damas) that are stagnant, and the privileged fishermen, if they fish there, must give one half of all they take to the renter of the fishery, and he may there employ as many other people as he pleases. The 500 privileged families have 400 boats, and cannot well contain less than 1000 able-bodied men. The rent according to some is 900 R., to others 100 R., and for the expense of collection (Surunjami) the renter is allowed a deduction of 125 R. Similar conditions exist in most of the other fisheries, and, as in Puraniya, the nominal profit arising to the owners from them is a mere trifle, but as these fisheries are here also in general farmed, there is no knowing their real value, even if we had access to see the books of the estate, for the renter either pays a premium (salami) for his lease or receives it as a trifle, as reward for his services.

The number of fishermen stated to belong to this district was 3800 or 3900; but many of these are employed part of their time gathering tamarisks for fuel,

in harvest, and in working the boats which belong to the district, but all the people employed in these are not natives, and a great many people, even of those who have the right to fish for a fixed sum, are employed in the fisheries of this district, but reside in Puraniya, Dinajpur, Nator, and Murshadabad. The number actually employed may therefore be 7000; and allowing, that each fishes eight months in the year, and catches five rupees worth of fish monthly, the total value will be Rs. 2,80,000, of which the owners of the fisheries may be able to secure a third part. No fish, so far as I heard, is sent to Calcutta. The sales are managed as in Puraniya.

The fishermen seem to live much as in that district. It is said that during the fishing season they can clear from two to six rupees a month, that is, on an average four rupees, and the people whom I employed merely to buy such fish as I wanted, complained of four rupees a month, as being hard wages.

The following is a list of the species, which I procured, and for what I have already observed concerning each kind, I have made reference by the initial and number to the lists given in the accounts of the districts formerly surveyed. The names of the fishes found in this district, wherever not otherwise mentioned, are those used at Munger.

1. Saukchi. I was a good deal surprised to find so high up a fresh water river as Munger, a species of *Raiia*; but I am told, that this fish is not uncommon so high up even as Kanpur (Cawnpore R.) This species approaches nearer the Lymme, described by Lacepede, than to any other mentioned by that author, but may readily be distinguished by having a fin on the fore part of the under side of the tail. It does not grow to a large size, at Munger is uncommon, but is thought very good. In Bengal it is called Sangkach and its name in the Sangskrita language is said to be Sangku, but these names are probably generic.

2. The Phokcha of Munger differs from the species of *Tetrodon*, called by that name at Nathpur. It is however very probable, that both may be called by the same name, as they have strong affinities. At Calcutta

this is called Gang Potaka, from its frequenting rivers, while the other is most commonly found in marshes, tanks or ditches. The fish, which I am now describing, grows to about six inches in length; and, when irritated, does not swell near so much in proportion as the other kind.

3. Bamach is an ugly animal, even for an eel, and may perhaps be the *Murene tachetee* of Lacepede. Europeans, who like eels, think this very good, but it is not common. When full grown it is said to be two and an one-half cubits long, and one cubit in circumference; but I strongly suspect, that the latter dimension is exaggerated, for one, which I procured, 38 inches long, was only 6½ inches round. It is a very distinct species from the Vamos of the lower parts of Bengal, although the names are undoubtedly the same. Eels are said in the Sangskrita language to be called sashya and sailushbhuk, but the name is probably generic.

4. The Vam. (P. No. 7) is the species of *Macrognathus* called aguillone by Lacepede. In the Sangskrita language this fish is said to be called Vami, Sukshmamukha and Bahyaprishtthaikakantaka.

5. The Pat Gaingchi (P. No. 8) is another species of the same genus.

6. The Bulla of Mungger at Nathpur (P. No. 9) is called Gulla. The names are undoubtedly the same, but whether my copyists have fallen into an error, or whether the fishermen have pronounced indistinctly, they being a people grossly ignorant, it is impossible to say.

7. The Khisra is the species of *Trichopodus* called Sada Kholisha at Goyalpara (R. No. 10) and Kotra at Nathpur (P. No. 10).

8. Garai is the *Ophiocephalus punctatus* of Block (P. No. 16). In the Sangskrita language this fish is said to be called Garaka, Garaghni, and Sakularbhaka.

9. The Sauri is the *Ophiocephale Wrahle* of Lacepede (R. No. 15). In the Sangskrita language this fish is called Sakula.

10. The Gajali, another species of the same genus, at Nathpur, was called Bhongra (P. No. 17) and in the Sangskrita is said to be called Sala.

11. The Dhalo is a *Holocentre* (P. No. 21), called Bheda in many parts of Bengal.

12. The Pathri is also called Bhola and is a species of *Lutian*, which by the Europeans at Calcutta is often called a whiting, being a fish nearly of the same size, and somewhat of the same taste with our European fish of that name, although it is inferior in quality, and in the eye of the naturalist has little or no affinity. I am inclined to think that it is the *Lutian Chinois* of Lacepede. It is common in the mouths of the Ganges. At Lokipur, on the eastern of these, it is called the Bhola, and at Calcutta, on the western mouth, it is called Kato Bhola. It ascends the Ganges as high at least at Mungger, and is very common in the Ghagri.

13. Bhola, from what I have above said, must be perceived to be a generic term, and the species which at Mungger is considered as the prototype, at Calcutta is called Pama Bhola, and by the English there is also called a whiting, but in the mouths of the Ganges this species often grows to the size of a cod. In this upper part of the river it is usually of the size of a whiting, and in every respect has a very strong affinity to the other Bhola, being also a species of *Lutian*.

14. At Mungger the prototype of the next Gangetic genus, Chanda, is considered to be the small species of *Centropome*, the 25th of the Puraniya and Ronggopur lists.

15. The Chhota Chanda is another species (D. No. 12. P. No. 26) of the same Gangetic genus.

16. The Vaghi is a small *Cobitis* (P. No. 27).

17. The Nakta is another (P. No. 32), which at Nathpur is called Kharika.

18. The Ramtengra is another (R. No. 33) called Bitturi at Goyalpara.

19. In the perennial sources amid the rocks of the Mungger hills is found another small *Cobitis*, which I have seen nowhere else and for which the natives have invented no name.

20. The Mangri is the *Macropteronotus batrachus Lacepedi* (P. No. 87). In the Sangskrita language it is said to be called Madgura

21. Singghi is the *Silurus Fossilis* of Lacepede (P. No. 38), and from the number of names it is said to have acquired in the sacred tongue, must have strongly attracted the notice of the Brahmins. These names are

Sringgi, Madgurasi, Kuku, Gomatsyali, Trikantaka, and Bishakantaka.

22. Boyari, another *Silurus* (P. No. 39). This ugly fish has also acquired many Sangskrita names, Sahasradangshtra, Pathina, Rupyabarna, Udaradirgha, and Mahasira.

23. Tambuliya papta or papta like a betel leaf, another *Silurus*, is the Pobho of Goyalpara (R. No. 37). Although an excellent fish, it has only in the sacred tongue acquired one name, Mahasaphar, and this is probably generic.

24. The Papta of this place is another excellent *Silurus*, the Kanipabda of Goyalpara (R. No. 38).

25. The Batausi is the *Malapterure*, which at Nathpur is called Angchacheya (P. No. 45).

26. The Silan is the species of *Pimelode* almost every where known by the same name (R. No. 58. D. No. 55), but in the higher dialect of Bengal it is called Silandha, and in the Sangskrita it is Silendhra and Silindha.

27. The Bachoya is another *Pimelode*, called Vacha in Bengal (R. No. 59), and Katla at Nathpur (P. No. 47).

28. The Patasi is another *Pimelode*, at Goyalpara called Borodoho (R. No. 54).

29. The Ritha is another *Pimelode* (R. No. 56).

30. The Gagra Tengra is another, the Ariya of Nathpur (P. No. 52). The name Gagra Tengra, in the lower parts of the Ganges is given to a very different species of the same genus.

31. The Ghorchelha is another very common *Pimelode*, the Vaghair of Nathpur (P. No. 53). This name is probably wrong, as it is likewise given to a kind of *Cyprinus*, which is so called in other places also, and is therefore in all probability the true Ghorchelha.

32. The Belaunda is another *Pimelode*, the Menada of Nathpur (P. No. 54).

33. The Palwa Tengra is another *Pimelode*, the Pathari Tenggora of Goyalpara (R. No. 49).

34. The Bajhi is another *Pimelode*, which at Nathpur is called Hara Tenggara (P. No. 56).

35. The Gangti is a small *Pimelode*, the Mahiyar of Nathpur (P. No. 59) and Tenggora of Goyalpara (R. No. 53).

36. The Batna is another *Pimelode*, the Padna of Nathpur ( P. No. 62 ) and Kongya of Goyalpara (R. No. 46).

37. The Tinkangtoya or 3 prickles is still another *Pimelode*, or at least is nearer that genus than any other. It is the Hara of Nathpur (P. No. 66).

38. The Pema is the ugly animal, which in the Ronggopur district is called Chaka (R. No. 65.)

39. The Patli is the small fish ( P. 70. R. 67 ) which I have referred to the genus *Stolephore*.

40. The Kauyal is a species of *Esox*, the Dhongga of Nathpur ( P. No. 69 ), and Ghore of Goyalpara (R. No. 66).

41. The Andewari is a species of *Mugil*, at Nathpur named Hundara (P. No. 73) and at Goyalpara (R. No. 70) called Muji.

42. The Kanchatti is a species of *Myste*, the Gohali of Nathpur (P. N. 75), and Phole of Goyalpara (R. No. 73).

43. The Golhi is the *Myste*, which at Nathpur is called Bhuni (P. No. 76), and at Goyalpara (R. No. 74) is named Boro Chitol. At Munger, when it grows very large, it is called Moe.

44. The Phasiya is a species of *Clupea*, the Phangsa of the Mahananda (P. N. 77), and Phoingya of Goyalpara (R. No. 71)

45. The Hilsa of the Hindi dialect or Ilish of the Bengalese (P. No. 79. R. No. 76), ascends only in small quantities so far as Munger, and there is very poor. In the S. E. corner of the district it is in plenty and tolerably good. In the Sangskrita language it is said to be called Illisha and Matsyaraja.

46. The Chapra, except in size, and the difference of a few rays in the fins is so like the above that I should be almost inclined to take it for the young Hilsa. It is a common fish, 6 or 8 inches long. I do not think, that I have seen exactly the same fish any where else, although it comes very near the Manmin of Goyalpara (R. No. 77).

47. The Suhiya is another *Clupanodon*, not very distinct from the last mentioned but smaller. It is the Khoyer of Goyalpara (R. No. 78).

48. The Kahi is another kindred fish, the Moti of Goyalpara (R. No. 79).

49. The small fish somewhat resembling the *Cyprini*, which was called Gutta at Nathpur (P. No. 88), and Ghila chanda at Goyalpara (R. No. 122) at Munger was brought under 2 names, the Pithari and Gorda ; its real name is therefore uncertain.

50. Chapti, it must be observed, near Calcutta, is a name given to one of the genus Lutian, which by the English is called a whiting, but at Munger it is the name of a small fish approaching to a *Cyprinus*, which at Goyalpara is called Layukuli (R. No. 84).

51. The Mali at Goyalpara was called Phulchela (R. No. 83).

52. The Chamak Chelha is the Nariyali Chela of Goyalpara (R. No. 81).

53. The Ghorchelha is another kindred ill-defined *Cyprinus*, called Ghorachela at Goyalpara (R. No. 80), which seems to be the same name, signifying horse-Chela, on account of its size, which is larger than that of the other Chela.

54. The Khuski is a small *Cyprinus*, the Jaya of Nathpur (P. No. 91).

55. The Chipuya is another very similar fish, the Bukranggi of Goyalpara ( R. No. 86 ). The name Chipuya is however uncertain for the same fish was brought also as the Piroiya.

56. The Patharchatta of the Chandan river in the interior of the district is the Chedra of the Tista (R. No. 90).

57. The Mayari of the same river is nearly allied to the above, and is what in the Ronggopur list (No. 39) is called Khoksa.

58. Under the name Vaghra the fishermen of Munger brought two small fishes, strongly resembling the last mentioned *Cyprinus*. One I have seen no where else, nor do its qualities merit peculiar notice.

59. The other Vaghra in the Ronggopur list (No. 88) is called Barila.

60. The Bangjhi Rewa is a *Cyprinus* approaching to a Muzil, and is the Bhanggon of the Ronggopur list (No. 95).

61. The Arangga is a similar fish, the Elangga of the Ronggopur list (No. 93). The two names are evidently the same. The name in the Sangskrita is said to be Erangga.

62. The Bhangnathi is a similar fish, the Voga of Goyalpara (R. No. 98).

63. The Chhahi of the arid rivers of the south is another similar fish, which at Nathpur is called Pangusuya (P. No. 102).

64. The finest of these fishes, allied to both the *Cyprini* and *Mugiles*, is here called Mirki and Nayen. It is the Mirka of Nathpur (P. No. 104).

65. The Kalbangs is a proper *cyprinus*, which has been mentioned in every district hitherto surveyed. It is the Basraha (No. 107) of Puraniya and the kalbosu of Bengal (R. N. 108). When caught in water, that is pure, and has a hard bottom, it assumes a different colour from what it has in dirty pools, many of the lateral scales being then of a coppery hue. In this case it is called Kundhna.

66. The Rohu, that most elegant of carps, called Rohit in Bengal, is here perhaps the most common fish ; but, being generally caught in dirty stagnant pools, it is seldom very good. Most excellent Rohus are, however, sometimes procured from the river. No fish seems so much to have attracted the attention of the Brahmans, and in the Sangskrita language it is said to be called Rohita, Raktodara, Raktamukha, Raktaksha, Raktapakshati, Krishnapaksha, Krishnaprishtha, and Jhashasrishta.

67. The Kursa of Munger is the fish mentioned at Nathpur (P. N. 108) by the same name.

68. The Katla of the Hindi dialect is the Kotol of Bengal (R. No. 109). What is most commonly procured, and it is very abundant, is very indifferent, owing to the same cause which affects the Rahu.

69. The Dadhai is the fish called Darhi at Nathpur (P. No. 114), and Soron Pungthi in Bengal (R. No. 111).

70. The Saphari of the Sangskrita language (P. 116) has, it is said, in that language two other names,

Proshthi and Tiktamatsya. In this district also it is considered as the prototype of an Indian genus of fish, included among the *Cyprini* of Zoologists. The vulgar name is every where radically the same, but on the small rivers of the south it is pronounced Pongthi, and at Munger it is called Pongthiya.

71. The Tikta Saphari of the sacred language, the Tit Punghni of Ronggopur (No. 115), and Changyi of Puraniya (No. 112), is at Munger called the Samar Pongthi.

72. The Dhemni of Munger is the Ghugini of Goyalpara (R. No. 120).

73. The Marawa is the Mara of Puraniya (No. 125), probably improperly written, and the Mouya of Ronggopur (No. 121).

74. The Sahari is a small *Cyprinus* somewhat like a minnow, which is found in the small streams, among rocks, south from Munger, and at Nathpur is named the Kosiya Dengra (P. No. 127).

75. The Danggila is another small *Cyprinus* found in the same places, and having its sides curiously reticulated with blue lines. I have seen it nowhere else.

76. The Godiyari is another small *Cyprinus* found in the same places, which together with the Desari (P. No. 133), the Lati (R. No. 125), the Dyangra (P. No. 132), the Paungsi (P. No. 131), and some others, has some affinity to the genus *Cobitis*, although they have very distinct scales, and it is by the want of these chiefly, in my opinion, that the genus *Cobitis* can be distinguished from that called *Cyprinus*.

Oblong crustaceous fishes are in very great abundance through the whole course of the Ganges, and at Munger those about the size of a prawn are remarkably well tasted.

The small crabs mentioned in the accounts of the districts formerly surveyed are common in the inundated lands.

Insects are very troublesome and destructive, although I have not heard that Locusts have ever been seen, but on the south side of the Ganges the white ant (Diyak) is more destructive than in any part that I have ever been. In Gidhaur many heaps of earth, much larger

than a native hut, were shown me as the remains of their work, but I had some doubts whether or not these might not rather have been tumuli of human structure. At any rate they had been long abandoned and among the works of the present ants I saw nothing like them. The present nests however are abundantly large and very numerous, and their inhabitants commit great havoc on wood, cloth, paper and straw. They seem to prefer deal to all other woods, and cloth of wool or of *Corchorus* is preferred to that of cotton.

In the parts of the country that are neglected, Moschitoes during the rainy season are an exceeding great annoyance. In the division of Kalikapur, especially the natives complain much, and endeavour to keep them out by fine screens fitted to the door. Before they go to sleep, a thick smoke is raised to expel the Moschitoes, and then the screen is shut. This can only give a partial relief, as in almost every hut there are numerous crevices through which some of these insects will find their way, but it no doubt reduces their number.

Flying bugs at the same season are exceedingly troublesome.

Honey bees are numerous in the woods, but no person makes a profession of gathering the honey or wax, nor is there any rent exacted. Many farmers, however, at idle times, collect both, and usually present a part to their landlord or his agents. The hill tribes gather a good deal of honey, which in general they eat ; but those near the great road dispose of it to Europeans, to great advantage, under the pretence of giving presents.

I might here have given an account of the Lac insect, and of that which makes the silk called Tasar, both of which are spontaneous inhabitants of the woods, but for the present I defer entering on these subjects, as part of the lac is reared by cultivation, and the whole will be described in my account of the agriculture, and as I shall have an occasion to give an account of the Tasar when I treat of the forests.

In the high parts of the district there are few or none of the shells, from whence lime is prepared. In the low lands they are in abundance, similar to those in Ronggopur.

## CHAPTER 2ND.

### OF PLANTS.

This district is an excellent field for a botanist, although the plants bear so great an affinity to those of the south of India, now best known to Europeans, that I have met with much less new matter than I did in the Ronggopur district. In treating of these productions, I shall follow the same plan that was adopted in my account of Puraniya.

In most parts of this district the whole waste land is called Janggala; where covered with trees it is called Katban; where covered with thick long grass reeds or bushes, especially tamarisks, it is called Bangjar, and where small bushes are thinly scattered, the waste is called Jhangti; but these terms are not applied with much accuracy, nor are the distinctions of great use.

It is estimated, that there are 585 square miles of inundated land occupied with reeds, bushes, and trees; 383 square miles of this are on the north side of the Ganges, and the greater part of the remainder is near that river. A large proportion is covered with tamarisks, about an equal quantity with reeds. A less share with stunted woods of the Hijar (Trees, No. 43), and about an equal quantity with rose trees, and finally, the largest share is covered with very coarse bad grass. The woods may perhaps amount to 70 square miles, exclusive of an equal quantity of rose trees, which do not rise to a height that can entitle them to be called woods, although the perversity of the English language requires that a bush bearing roses should be called a tree.

In woods, thickets of bushes, and deserted villages, which have become totally wild, there are 1731 square miles of land sufficiently level for the plough, and there are 1146 square miles of hills, that are covered with woods. Including the tamarisks we have therefore in all for forests and thickets almost 3100 square miles. By

far the greater part of these is kept in a very stunted condition by the following causes.

1st. In many places the species that grows never reaches to the size of a tree, which is especially the case with the rose and tamarisk.

2ndly. In many places, especially on the hills, there is no soil capable of supporting large trees. This cause, however, does not operate to a very great extent.

3dly. Every year in spring the whole forests are burned. This destroys all rotten branches and leaves, and certainly tends greatly to improve the air, to keep open the country and to meliorate the pasture, but it no doubt checks the growth of the tree. It would indeed appear wonderful to any one, who saw the conflagration, at a time when every thing is parched like tinder, how any tree can escape destruction. It is supposed by many, that these fires are spontaneous and therefore beyond our control, but this I have no doubt is a mistake. Both the cutters of wood and those who tend cattle assured me that they kindled the fires. It is only among the idle legendaries of towns that the idea of spontaneous fire prevails. While so vast a space of country is waste, the preservation of health and communication are the primary objects; but if the country were fully occupied I should have no hesitation in recommending that the forests, which must always exist on lands unfit for cultivation, should be carefully preserved, and in that case I have no doubt that they would in many places grow to a good size, and in a very short time would advance to the stature which they are capable of attaining.

4th. The extracting rosin (Dhuna) from the Sakuya (*Shorea robusta*) tree keeps a large proportion of that valuable timber in a very stunted condition, as the tree is always killed by the operation. This is a perfectly wanton abuse; for a tree, if allowed to grow large, would give the rosin equally well, and when the rosin has ceased to flow, might be cut down with equal advantage, as if rosin had not been extracted.

5th. The extraction of catechu is managed with as little economy. The people, not only before the trees have acquired an adequate size, begin to cut them, but they even dig up the roots; yet it is probable, that one

square mile planted with the Mimosa, which yields this drug, if divided into 20 equal portions, one of which should be cut every year, would supply 10 times the quantity that is now made in the country.

6th. The rearing the silk called Tasar keeps the trees employed in a stunted condition. Perhaps the spaces these occupy, and which are called Ara, should have been included among the cultivated land, and in fact with proper economy this occupation should not at all interfere with the extent of cultivation. The soil fittest for the tree is a poor red clay, and the trees are so pruned, that they are far from injuring the crops, which here thrive best on such land, namely Sesamum and the pulse called Kurthi. A very few square miles, regularly planted with the proper trees, would supply 10 times the quantity now raised, and not one acre of it need be fallow, oftener than was necessary to prevent the soil from being exhausted. Such is not in general the present system, although there are examples sufficient to show by experiment that it is abundantly practicable. The trees are in general taken straggling as scattered by nature, and it is thought a great exertion when most of the other trees that were intermixed are now and then cut.

7th. The cultivation by the hill tribes, which admits of two or three crops and then requires that before the land is again sown the trees should spring to a certain height, when they are again cut, necessarily keeps the woods in these hills in a very stunted condition, and this is without remedy. Were proper care however bestowed, the trees when thus cut might supply by far the greatest part of the charcoal and firewood that is required.

8th. The timber cut for building and furniture no doubt contributes to keep the woods stunted, but the quantity, especially of any girth, is exceedingly small, nor owing to the other causes could any considerable quantity be procured. I have no doubt that 20 square miles properly reserved, and cut in turns, would give a supply of ten times as much as could be now procured.

9th. The want of economy in managing the woods, when cut for fuel, may be considered as the grand cause of this scarcity of good timber. The number of iron forges, both in this district and in Virbhumi, and the

supply of Murshedabad and some adjacent towns, render the demand for fuel more considerable than usual in Bengal, but the extent of forest is immense, and in Virbhumi there are very large woods close to the forges, which in fact occasion by far the greatest consumption. I am persuaded that in passing through a corner of that district, and quite near the forges, I saw at least 400 square miles covered with bushes, in which scarcely a single tree could be found. So soon as a bush comes to be the thickness of the wrist it is cut and the young shoots are allowed to be checked and retarded by the adjoining bushes. The same evil, although to a less degree, extends to most of the woods in this district. In general, however, when a tree has become as thick as a man's leg, it is cut for a small post, and its shoots are allowed to be choked and their growth retarded as above. On the hills the roots of trees that have been cut down and burned, in six or seven years after the field has been allowed to lie fallow, acquire a good size, because the whole has been cut at once, and one shoot does not choke another. I am persuaded that one acre managed thus would give more charcoal than 20 cut constantly whenever a bush acquires a little size. In Gogri however many of the people have had the judgment to preserve their woods, and to cut the whole of a certain extent at one time.

In the present confined extent of cultivation the saving of the wood is of no consequence, but I think it necessary to dwell on this point for two reasons. First, it might be represented that the extension of cultivation would interfere with the procuring fuel, materials for building, rosin, Tasar, catechu, etc. which, by what I have said, I have endeavoured to show, would be by no means the case. The broken rocky land, that must always be unavoidably waste, is capable with management of supplying a demand 20 times greater than is now made. Secondly, by this proper management a small extent in the immediate vicinity of the forges would supply the whole fuel demanded, and the whole might be brought on carts at a very moderate expense. At present a great part is carried twenty miles and upwards through a hilly country that admits only of back loads.

The havoc that is now wrought by everyone using the first tree that suits his purpose is vastly greater than I could have imagined, yet these stunted woods produce every evil just as much as if they were the most stately forest, and I have already had sufficient opportunities of enlarging in my accounts of other districts on these evils. I shall here only, on account of the magnitude of the evil, take the liberty of earnestly again recommending the subject to the consideration of Government. The expectation of anything being here done by the spontaneous exertions of the landlords is still more remote than in the other districts, and the evil has arisen to a greater height. The assessment is so trifling that it is not a stimulus to industry, nor in my opinion will this district ever be cleared without the active interference of Government.

The observations that I made on plantations in my account of Puraniya are applicable also to this district, where indeed the practice of planting has been carried to a more destructive length. Mango groves are one of the articles of luxury that should be considered as a resource for revenue, and great advantages to society would result from Government's exacting two anas a year on every mango tree, young and old. The tax of course must be farmed, and ought to apply to free as well as assessed estates, liberty being left to every one to cut down his trees when he pleased.

I shall now proceed to enumerate the trees which commonly grow in this district, referring to former accounts for particulars already mentioned. In this district the Bamboo is very little cultivated, nor did I ascertain the kinds that are reared, there being scarcely any near Mungger, where I passed the rainy season. I presume that they do not materially differ from those in Puraniya. In the tables of cultivation will be found an estimate of their value and quantity. It must be observed, that they are greatly superior in quality to the wild bamboos of this district, which are the only ones that I shall particularly notice.

1. The most common wild bamboo of this district, in the wastes of Tarapur, where more grow than in any other part, is called Tanai-bangs. It differs from any

that I have before seen. The stem is in general very small, from 7 to 9 cubits long, and from  $2\frac{1}{2}$  to  $3\frac{1}{2}$  inches round, and it has very little cavity. In that part of the country the people consider themselves as being possessed of only one species, and so far as I can judge they are correct, but at Munger the people talk of three kinds,—Phul, such as above described, Harha, very small and solid, used only for walking sticks ; and Chahar, larger than the others, and having a larger cavity. I suspect that these are mere differences of size in the same species, which for the purposes of commerce is sorted into three kinds. This bamboo seems to prefer dry stony land, and is most common in the western parts of the district. I saw none on the low lands west from Bangka, and on the hills of Rajmahal they are far from being plentiful, but everywhere west from the town of Bangka they occupy a large proportion of the forests, and considerable extents contain nothing else.

2. I heard of some of the thorny bamboo, called here Katela-bangs. It is said to grow near Jathaurnath, but I did not see it.

3. On the bank of the river between Udhawa and Kahalgang there are a few bushes of Ratan, and I saw it nowhere else, the air here being too dry. It is of the kind which in Dinajpur (No. 6) is called Gorol.

4. I saw no betle nut palms, and not a dozen of the cocoanut. These were planted merely as ornaments, or rather as curiosities. They are not an object of profit anywhere north from Santipur or Guptipara.

5. The Khajur in this district is an object of considerable importance. I have before noticed its great affinity to the *Phoenix* or date, and, after having compared the fruit and whole plant with the description in Koempfer, I am inclined to think, although it was considered by Linnaeus as forming a distinct genus, that it cannot even be called a distinct species, and does not differ so much from the date of Arabia as a crab apple does from a pippin. The ripe fruit is exceedingly sweet; but is covered by so little pulp, that it would be unfit for preserving. The only difference I can observe is, that in the date the root is creeping, and sends up young shoots round the parent stock ; but such I have never

observed in the Khajur. If such a want in the latter does not depend on neglect of cultivation, the species may be considered as distinct, and there is no hope of improving our tree to an equality with that of Arabia, as no good date is there reared from seed : but if by care young suckers could be procured, then by a selection of these from the best kinds, by copious watering and plentiful manure, the quality of the fruit might be improved, and we might have proper dates, which would be one of the greatest possible improvements on the hilly parts of India.

In many parts of the country the date is so thinly scattered that it would not be an object for any person to take a licence for extracting its juice, but no doubt it is there smuggled. On this account and the difficulty of levying the tax on the present plan, it might be perhaps advisable to levy the tax by a certain rate on every trees so that every person would cut down all the trees that were not required. Rajmahal, Bhagalpur, Ratnagunj, Kumurgunj, Tarapur, Mungger, and Suryagarha are the divisions in which at present this palm is most copious. A tree is fit for being cut when 10 years old, and lasts about 20 years more, during which time, every other year, a notch is cut into the stem just under the new leaves that annually shoot from the extremity. The notches are made alternately on opposite sides of the stem. The upper cut is horizontal, the lower slopes gradually inward from a point at the bottom, until it meets the upper, and a leaf at this point collects into a pot the juice that exudes. The season might commence about the beginning of October, and lasts until about the end of April, but the license is seldom presented before the end of November. After the first commencement, so long as the cut bleeds, a very thin slice is daily taken from the surface. In from two to seven days the bleeding stops, the tree is allowed an equal number of days rest, and is then cut again, giving daily two sers (88 s. w.) of juice. This is what the people employed allow, but from several circumstances there can be little doubt, that the 2 sers may be the average daily produce. In the afternoon the men cut the trees and fasten the pots, and in the morning they carry the pots

to the shop, where it is to be retailed, and a man can manage from 10 to 16 trees. We may take the latter as the fair number, the people, who gave me the account, being naturally inclined to diminish every profit, as they paid taxes according to their supposed profit. The juice when fresh is very sweet, with somewhat the flavour of the water contained in a young cocoanut. This is slightly bitter and astringent, but at the same time has somewhat of a nauseous smell. Owing to the coolness of the season it does not readily ferment. It is therefore collected in large pots; a little ( $\frac{1}{16}$ th) old fermented juice is added, and it is exposed to the sun for about three hours when the fermentation is complete, and it sells at I paysa ( $\frac{4}{15}$  part of a rupee) for the ser, which is nearly  $\frac{1}{4}$  lb. avoirdupoise. A man therefore should daily collect about 4 anas worth ; and his wages being  $1\frac{1}{2}$  ana, the retailer has  $2\frac{1}{2}$  anas a day on each man that he employs ; but then he must pay the tax, amounting, so far as I could learn, to about one ana daily on each person employed, and he must also pay the rent on the trees, which usually amounts to  $\frac{1}{2}$  of the juice or 8 anas each tree for the season. A tree therefore gives annually about 64 sers of juice, or bleeds about 32 days. As the season lasts rather more than five months, it is evident that 64 mature palms must be allowed for each man, and as the immature amount to about one-third of the whole, every man would require in all 94 palms. The 64 palms would give about 64 R. worth of juice, and the 94 palms young and old might well bear a tax of 16 R. a year, or for sake of moderation 2 anas each. I am perfectly aware that a vast many palms of this kind yield no such profit to the parties concerned, but the reason is that they have been allowed to spring up in places where there is no market sufficient to induce a man to procure a licence, or that they have been allowed to grow to a much greater number than the licensed dealers will take. If the tax, as I have already proposed, were levied on the trees, every man that chose, even in the most remote parts, might rear what he wanted, and might procure this luxury, which at present, without contraband, is totally out of his reach, and all superfluous trees would be destroyed. At present, although in many parts the number of trees

is totally superfluous, the people licensed to sell palm wine benefit little by that circumstance, for the Zemindars having in general retained the property of these trees have as it were a complete monopoly, most of their estates being very large.

In this district no sugar is made from the juice of this palm. The natives call it Mitha Tari in order to distinguish it from the juice of the palm that will be next mentioned. Half a ser or a pint of the fermented juice makes some people drunk, and few can stand double the quantity. Mats for sleeping on are made of the leaves, and are reckoned the best used in the district.

6. The Tal or Tar is the *Borassus flabelliformis*, usually called Palmira by the English. In the divisions above enumerated it is perhaps as common as the last mentioned palm, and is more generally diffused, so that on the whole, it is the most common ; but in many places it is applied to little use. No one in some divisions will pay a licence for retailing the wine, no sugar is prepared from the juice, and its stem is seldom applied to use, although few materials are more valuable for making good thatched roofs. The leaves are never used for thatch, but are made into mats, on which people sleep, and which are next in quality to those made of the Khajur. They are also used as a kind of umbrella to keep off rain. Although the juice is not so sweet as that of the Khajur, the wine, it is said, becomes stronger, and it ferments without addition, or without being exposed to the sun ; but this is probably owing to the heat of the season, as it begins to yield juice about the middle of March, and the season lasts for two months. Trees may be had which will bleed throughout the rainy season, and the juice of such is used for fermenting bread, but it could not be procured in a quantity sufficient to enable a man to pay duties. This palm is often planted, in rows, by the sides of roads, or round new tanks ; but by far the greater part springs spontaneously from seed scattered by the animals, which eat the fruit. Neither it nor the Khajur would however appear to be native plants, and, where found in the woods, may be always traced to former villages. The palm does not begin to flower until between 25 and 40 years old, and lives to an

indefinite but very extended old age, far beyond the recollection of man. After it begins to flower it continues ever ever afterwards at the proper season to yield juice, as it is the flowering stem (spadix) which is cut, and its bleeding seems to debilitate the tree no more than if the flowers or fruit had been allowed to form, which the operation prevents. Three times a day a thin slice is cut from the point of the unopened spadix, until it entirely withers, and a pot is kept constantly suspended under it. New spadices shoot in succession, so that the tree bleeds constantly for two months, beginning about the end of April ; and as I have said, a few straggling spadices occur throughout the rainy season. I think that in the account of Puraniya I have mistaken the season in this juice is extracted, which I should think must be the same in both districts. It must however be observed, that in Bhagalpur it is only the male spadices which are cut ; but I am told, that after the fruit is ripe, in August or September, the female spadix may be cut, and would bleed without injuring the tree. A tree gives daily about 2 sers or  $4\frac{1}{2}$  lb of juice, worth about 2 paysas (each equal  $\frac{1}{64}$  part of a rupee), that is, the tree, during the season, gives to the value of about 15 anas of Tari, and where cut for wine, each usually pays 8 anas to the landlord.

7. The Badam, called *Terminalia Catappa* by botanists, has just found its way into the vicinity of places occupied by Europeans, and must be considered as an exotic.

I have found three kinds of Myrobalan ; but I must observe that these kinds and some others run so into each other that I am not exactly satisfied how they are to be distinguished, nor concerning the exact number that, in a botanical light, should be considered as species or varieties.

8. In the woods of Bangka I found what I take to be the *Chebula* of Gartner. It was there called Harila, the same name, that in Mysore is usually given to the Myrobalan employed by dyers and tanners ; yet the plant of Karnata would appear to be a different species from that of Magadha. I only saw the Harila in fruit. Again at Mungger the Myrobalan used by the dyers is called Harra, but I have only seen the plant in flower, and, so

far as I could judge from such a view, it seemed to be exactly the same with the Horitoki of Bengal (D. 14. R. 26), which I take to be the *Chebula* of Gartner; but the Harra of Puraniya (No. 12) as I have said is different both from the Horitoki of Bengal, and the plant of Mysore. It must also be observed that in the druggists shops of Mungger 2 kinds of Harra are sold, neither of which agree well with the figure of the Chebula, nor with the fruit of any tree, that I have examined.

9. Little less confusion arises concerning the *Myrobalanus Bellerina* of Gartner. The species with the very fetid flower, which I consider as the real plant of that excellent botanist, is very common, and while in the wastes of Bangka it is named Lapung, in the more cultivated parts is called Behara or Bahera.

10. The kindred Myrobalan, with flowers less offensive or rather agreeable, on account of the size of its fruit, is here called the Chhota (little) Bahera, while in Puraniya it was called the larger Bahera (No. 14). It must however be observed that I cannot exactly say whether or not the flowering tree, that was brought in Puraniya, was of the same species with that called by the same name, which I found in fruit, because the trees are never in flower and fruit at the same times, and I was in very distant parts, when I saw the flower and fruit. I am inclined therefore to suspect, that the plant with the less offensive smell may be different from the greater Bahera of Puraniya, and what I have said in my account of that district concerning its flowers must therefore be expunged. In this district I have not seen the Greater Bahera ; but the Chhota or less offensive kind is common, although here also I have not been able to procure its full grown fruit. This is a much more difficult matter than might be imagined, as various animals seem to be so fond of all the Myrobalans, that they devour the outer pulp before it arrives near maturity. The natives believe, that a ripe Myrobalan is never seen except when given by a miracle to some holy person, who, after eating it, requires no more food. It is possible, that the various stages of greenness, in which the Myrobalan must be collected, gives room to a great variety of shape and size in the same species, and may have occasioned much of the

difficulty of which I have complained. The fruits of a numerous class of Indian *Terminalias* are winged and dry, and I have no doubt that these kinds are of the same genus with the Chuncoa of America. Of these I have in this district obseved four kinds.

11. The first and most important is the Asan of the natives, which Dr. Roxburgh in his MSS. calls *Terminalia alata pilosa*. Where allowed to remain undisturbed, it grows to be a very fine tree, with a remarkably straight stem, and may be known at a considerable distance by its bark being dark brown, and cut into small squares by deep notches, vertical and horizontal. The same, however, takes place in a kindred species, the Moti of Mysore. The bark of both is burned, and the ashes serve in place of lime to chew with betle. The wood is reckoned strong and durable; and, although it does not take a polish, would for many purposes be very useful. The chief use, to which the tree is however applied, is to rear the Tasar silk, of which I shall here give some account.

Dr. Roxburgh having given a description of the animal, I shall confine myself to describe its management in this district, regretting that I have not an opportunity of consulting the account given by Dr. Roxburgh, a reference to which might have saved me much trouble and might have enabled me to judge which of the accounts that I received were the most probable, for in some points they are contradictory.

The tree abounds chiefly in the part of the district that is situated East from the Chandan, and between that and the Rajmahal hills, and there occupies as large a space as the bamboo does towards the west. The animal is reared by all castes, who inhabit these parts, but in general by fellows, who are too lazy to toil in the harder labours of agriculture, and especially by the armed men employed under Ghatwals to preserve the peace of the country. With a view perhaps of securing the employment to themselves, they have established certain rules of purity, as they call it, which they allege are absolutely necessary; and they allege, that any infringement would totally destroy the insect. Women, who are best fitted for such a work, are entirely excluded

from it as totally impure, nor are they permitted to approach the place; and while employed in this work, the men totally abstain from the company of their wives. Again most of the low vile castes are excluded by their appetites abandoned to the gross impurity of animal food. The breeders eat sparingly, once a day, of rice cleaned without boiling, and seasoned only with vegetables. They are considered also to preserve their purity by never employing the washerman nor barber, so that the taste of these moths in cleanness is not exactly what prevails in England, but it is common enough in India.

Concerning the method of procuring the seed cocoons, I found in the accounts of the natives the utmost difference. In Bangka it was stated, that the only good seed was procured from the forests, from whence the spontaneous cocoons were brought by people of wild tribes, were purchased by merchants, and distributed among those who rear the worms. From these cocoons three successive broods are reared, but those reared from the wild cocoons (Dhaba) are the best; the others, Sarihan, Jarhan and Langga, gradually degenerate. At Tarapur and Lakardewani it was stated that the kinds are quite distinct, that the good Tasar (Dhaba) is always reared from cultivated cocoons, some of which are preserved through the year for propagating the breed, and that the wild cocoons are only used for this purpose, when from accident and carelessness the proper seed is lost; and the Tasar, which these give, is always of an inferior quality, but is of two kinds, Sarihan and Langga, the last of which is very inferior, and is seldom employed. Each kind, according to these people, breeds twice in the year. In Fyezullahgunj again it was said, as in Bangka, that no seed was preserved through the year, that in the beginning of the season wild cocoons were procured, but that the silk which these gave was of inferior value, and that the cocoons of this brood were chiefly preserved for producing a second, of which the silk was of the best kind. These accounts are in direct opposition to each other, nor can I take upon myself to assert which is true, or whether any of them is false, although I am inclined to rely most on the account given in Lakardewani and Tarapur; but it may

happen that such different practices really prevail, and that the influence of them on the quality of the silk is quite imaginary: for I would observe, that at Bhagalpur all the cocoons are usually sold indiscriminately as of the same value, and very often intermixed. The weavers indeed say that there is a difference in the quality of cocoons, and that one kind (Dhaba) is more easily wound, and gives a larger quantity of silk, while the Sarahan produces  $\frac{1}{2}$  less, but it is of a better quality. The merchants who deal with the simple breeders endeavour probably to keep up distinctions, of which they avail themselves. They pay in advance for the whole, and give a very low price; but they no doubt are often defrauded by people who never fulfil their engagements.

Among other ridiculous imaginations concerning the insects propagated, as I suppose, to impress the people with an idea of their purity, it is supposed that a Tasar female moth will not admit the embraces of a male of the same paternal family with herself. The breeders however very judiciously leave the whole adjustment of this delicate point to the discretion of the females. The seed cocoons are placed on a large flat basket; and when the moths burst the cocoons, they are allowed to form such connections as they please. In from 15 to 20 hours afterwards the males are thrown away, and from 20 to 25 impregnated females are placed in a cylindrical basket with a narrow mouth, which is covered with leaves, and some leaves are laid on the bottom of the basket. In some places an earthen pot is preferred. On these leaves, in the course of the day, the female deposit their eggs, and are then thrown away, and the eggs are placed in small baskets made of the Bhela (tree No. 137) leaves. On the ninth day afterwards the eggs are hatched; and the basket, on which they are lying are put upon a tree, over the leaves of which the young insects immediately spread. When they have consumed these, the worms are removed to other trees, and in 36 days from being hatched they begin to spin. In 15 days this operation is completed, when all the young branches are cut, and the cocoons are thus collected with very little trouble. The only operation at all troublesome is the removing the worms

from one tree to another, and this might probably be avoided by putting no more worms at first on each tree than it should be able to maintain. The worms however must be watched, as crows and other birds and hornets are apt to destroy them. The whole space of time occupied by the two crops may be about five months, beginning about the first of July, and ending about the last of November. A vast number of the cocoons preserved for seed burst, and these can only be sold for about half price. Those originally intended for sale killed by being put in boiling water, and then dried are in the sun.

In procuring food for these worms, the only trouble is to select a piece of ground on which the Asan tree grows, intermixed with few others. These latter, and all bushes ought to be removed, and all the large branches of the Asan tree should be lopped near the stem, and young shoots permitted to grow; for these produce large succulent leaves fit for the worm. A space thus cleared is called an Ara. Although no tree is preserved in the Ara, except the Asan, as being best fitted for the purpose the worm in a state of nature feeds on several others, Sakuya (trees, No. 61), Dha (No. 15), Sudda (No. 105), Thanki (No. 102) and Ghungti (No. 147). The ground of the Ara is sometimes cultivated for one or two years, and is then allowed a fallow, and the cultivation no doubt improves the Ara, as it keeps it tolerably clean; but it is often neglected and the condition of the Ara is too often slovenly, on which subject I have formerly dwelt. The worms are only applied to the same tree once in the two years, a whole year being necessary to allow the new shoots to grow.

Sometimes one man farms an Ara for himself; at others three or four unite, but less than two men or more than ten are seldom actually employed. About four men is however, I understand, the most usual number. In many places the breeders pay no rent for the Ara, because I believe the greater part there is reared on the lands which the breeders hold for military service. In other parts again each man pays 1½ R. a year, and in others only from 1½ to 2 Pan of cocoons. The heaviest rent is in Bangka where the greatest quantity of cocoons is reared.

This year it was said in Lakardewani where I obtained the accounts on which I place most reliance, that each man reared on an average 25 rupees worth of cocoons at 4 R. a Kahan (458 cocoons), but the crop was uncommonly good and the price high, and the breeders stated that the common rate is about 10 R. a man, the price being the same, for the markets of both Virbhumi and Bhagalpur being accessible to the people of Lakardewani, they obtain a fair price. As in that division there are about 200 Aras, the total average amount would at this rate be R. 8,000, but one merchant who was taken unawares, stated the exports at 10,000 R. which does not differ much from the above, and probably is nearer the truth. Other traders indeed depressed the exports to 2,000 R. but no short of reliance can be placed on what the people of that description in this district say. In order however to keep on the safe side of moderation, we may allow 12 R. for each man employed, which is as little as can reasonably be admitted, for out of this the breeder has to pay a trifling rent.

In Kalikapur it was said that there are about 30 Aras, for which we may allow the produce to be 1440 R.

In Bangka are said to be 500 Aras, yet for the value of the exports the traders allowed only at the utmost 2000 R. Setting this aside as ridiculous, and advertiring to the higher rent, we cannot allow that the profits of each man's labour is less than in Lakardewani; the produce may therefore be taken at 24,000 R.

In Fayezaullahgunj are said to be 150 Aras, in Tarapur 200 and in Mallepur 10. These pay no rent but having no demand, except from Bhagalpur, they must sell lower, and I shall not allow more than 10 Rupees for each man, giving 14,400 R. for the average produce of these three divisions. The total average value of the cocoons is therefore, I have no doubt, at least 49,440 R., but the produce is exceedingly uncertain, for besides accidents from crows and hornets, the worms, in the early part of the cold season, are liable to suffer great injury from fogs.

The occupation of rearing the worm, so much suited for the indolent disposition of the inhabitants of

this district, would seem to render an extension of the practice worthy of encouragement. I am indeed informed by Mr. Glas, Surgeon at Bhagalpur, that some years ago the Board of Trade had it in contemplation to send some of this silk home, and I am inclined to think that it might be found a very useful raw material in our manufactures, and would therefore strongly recommend that the Board should carry into effect its former intention. It so happened that, on the abovementioned occasion, the Board consulted a very ill-informed person, who represented that the rivalship of the Company would raise the price of cocoons so enormously, as to ruin the weavers of Champanagar. Even allowing that this would have been the case, it seems irreconcileable with justice that the breeders should be depressed in order that the weavers may live at ease; but farther I have no idea that a properly conducted purchase on the part of the Company would produce any injury to the weavers; on the contrary, I have little doubt that its effect on the market would be highly advantageous. As there can be no bounds to the quantity capable of being raised, except the want of demand, we may be well assured that an increased demand would be followed by an increased cultivation, and the more extended the cultivation is, the greater must be the chance for an equal price of the commodity, accidental losses in one part being compensated by good crops in others. Now the great evil, under which the weavers at present labour, arises from inequality of price. Some years the quantity procurable is so small as to afford no employment for the whole, and the price of the material rises so high that they have little gain. If the person employed to make the Company's purchases were indeed to take all the cocoons and allow none to be sold, except to him, as has, in some other instances, I believe, actually happened, the weavers would undoubtedly suffer; but if the agent purchased at first only small quantities, and gradually increased them, should a demand in Europe arise, there can be no doubt, I think, of the weavers having a more equitable supply, especially if the agent were directed altogether to stop the purchases, whenever the price of cocoons rose above a moderate height.

12. The Kahu of this district is by Dr. Roxburgh considered as a mere variety of the Asan, and in his MSS. accounts is called *Terminalia alata glabra*. While the other grows on elevated dry lands, this delights in having over the banks of the mountain torrents, where it spreads out on all sides and has a smooth bark, so that in their general appearance the two trees have little resemblance. The timber of the Kahu is strong and durable, but it does not take a polish, and the leaves are never applied to feed the Tasar worm.

13. The Arjun is a tree more resembling the Kahu than the Asan, as its manner of growth and places where it is found are the same with those of the former. I have only seen it towards the S. E. parts of the district where the Bengalese language prevails. Its timber is exported.

14. In the same parts I found a kindred tree, for which none of the natives that I consulted had a name. It is probably therefore of very little use.

15. The Dha of this district, mentioned above, is one of the trees on which the Tasar worm naturally feeds, belongs to the same natural order with the Asan, and to a genus which Dr. Roxburgh, in his manuscripts, has named after our friend, the late Dr. Anderson of Madras. The Doctor has, I know, described two species, but I do not know to which this ought to be referred. If undisturbed, it grows to a good size and is reckoned a strong useful timber for common purposes, such as axle trees, the pestles of oil mills and pots, and its bark serves as a tan. It grows everywhere in the forests South from the Ganges, and must be distinguished from the Dha (No. 190), to be afterwards mentioned, although that may possibly belong to the same genus.

16. The Daradmeda of Mungger is the *Tomex sebifera* of Willdenow, mentioned in the Ronggopur list (No. 38) under the name Vagmal. At Mungger the wood is applied to no use. The bark is officinal.

17. The Singgarhar [*i. e.* Harsingar] of Puraniya (No. 18) or *Nyetanthes arbor tristis* of Linnæus, in the woods of Bangka, as well as near villages, is very common. In these woods it is called Saparam.

18. The Morawa of the Mungger hills is a fine species of *Vitex*, which I have seen nowhere else. The

people near the hills say that its wood is strong, but it is not known to the exporters of Munger and is therefore probably of no great value.

19. The Gandhai of Munger is a species of *Cornutia* or *Premnia*, which seems to me to be the same with the Bukdhole of Goyalpara (R. No. 48) and certainly is the same with a tree brought to me from the lower hills of Nepal, where it is called Gindhiyari. Its wood is not used by the carpenters. In the forests of Bangka I found a tree, called there Chirchiri, which I do not think different from the above, although its leaves are generally placed by threes while those of the Gandhai are opposite.

20. The same confusion prevails here, as in former districts, concerning the trees called Gambhari. I find that the species of *Gmelina*, so called in Puraniya (No. 20), is by the carpenters considered as the true Gambhari, sometimes here pronounced Gamhair. As its timber is both light and strong, they make of it drums, and the frames and poles of palanquins. The men of science again give the name Gambhari to the *Trewia*, as will be afterwards mentioned.

21. The Teak tree has been planted by some gentlemen near Bhagalpur, but has not thriven.

22. The species of *Cordia* called Dhovoli in Bengal (D. No. 19, R. 57) about Bhagalpur, from the glutinous quality of its fruit, is called Lasaura, but this name is generic, and is applied to several species. Its bark, beaten and dried, makes an excellent match and is what many of the native soldiers use in their matchlocks. In the woods of Lakardewani this tree was called Boch. I think it probable that it is the Vidi Maram of the *Hortus malabaricus*. It is one of the Indian officinals.

23. The Jhancha of Munger is another species of *Cordia* with wedge shaped leaves, which in this country seems to be very rare, but which in the South of India I have found very common. In Karnata it is called Kiri Shille, and in the Tamul language Narawole.

24. The *Ehritia laevis* of Willdenow at Munger is named Hading, and its bark is used to stain the teeth red. Its wood, being very hard, is used for making the implements of agriculture, especially the plough, but it is never used in fine work,

25. In Bangka a plant very nearly, or perhaps entirely the same with the above, and different from the Dangt-Rangga of Puraniya (N. 24) was brought by that name. Its bark chewed with the leaves of the tree (No. 31) gave as deep a red stain as betel.

26. The *Bignonia indica* is common in the woods, and in the Hindi dialect of Magadha, as well as in Puraniya (No. 26), is called Soinpat. It is an officinal plant, but its timber is not used.

27. The species of *Bignonia* which in Ronggopur was called Atkopaliya, I observed common in the woods of this district. It was called to me Bandar-Lauri (*simiae penis*), but I am told that this name is now usually applied to the *Cassia fistula*, and the people of Mungger say that they are well acquainted with the Adhkapaliya, for so the name ought to be written, and implies that the plant is a cure for the kind of headache called in the language of men (Adhkapaliya) hemicrania, and eight foreheads (Atkopaliya) is nonsense. The fruit alone is called Atkopaliya or Adhkapaliya; the tree is called Pangdar. The wood is used in the forests for beams but is not brought to the workshops of Mungger.

28. Nearly allied to the Bignonias is the *Schrebera swietenioides* of Dr. Roxburgh, which is very common in the woods of Bangka and in those south from Mungger. In the former it is called Ja's in the latter Ghatera. It must be remarked that it has not the smallest affinity to the *Schrebera albens* of Willdenow, which will be afterwards mentioned (No. 148) among the plants of the natural order of Khamni. Its capsule is the only part that has any kind of resemblance to the Swietenia or Mahogany, and its wood is by the natives considered as of no use.

29. The *Flos convolutus* in this district is not common. I have seen it only once on the banks of the Ganges. It is called Gul-Elachi, which by the Bengalese (R. No. 59, D. No. 21) seems to have been changed into Golongeho, a plant well-known to them. As both are officinal this is productive of great inconvenience, the Golongeho (*Menispermum tuberculatum* E. M. *Mexeluso* synonymo Rumphii) having totally different qualities. The wood is of no use.

30. The Echites, called *Nerium antidysentericum* by Willdenow, is very common in the woods of Mungger where it is called Koraiya. In my account of the districts formerly surveyed, it has been mentioned as the Dude (D. No. 22) and (Dukhuri R. No. 61, p. 22), The name Dude here, as well as in Dinajpur, is given to another plant (No. 157). At Bhagalpur the tree is known by the name of Dukhuri).

31. A plant with which I have met in the dominions of Ava, and which differs only from the former in having heavy leaves, grows in the same places and is there called by the same name, but in the forests of Bangka it is called Hat.

32. The Dud-koraiya of Mungger is a very fine *Nerium*, of which I find no traces in the botanical works that I possess. The timbers of these three Koraiyas possess nearly the same qualities and are in much request with turners, who make of them walking sticks, the handles of fans and spears, rolling pins, chessmen, boxes, cups and toys.

33. The *Echites scholarus* is found in the cultivated parts of the district, where it is called Chhatwan, but is not common. The bark is in much request as a medicine, which requires all that can be found, and the timber is not applied to any use.

34. The *Strychnos nux vomica* of botanists is common in the southern hills of this district, where it is called Kungchla. The seed is sold in the markets as a drug.

35. The Bassia, mentioned in my account of Dinajpur (No. 24) and Puraniya (No. 30), is found in great quantities, both entirely wild, and allowed to grow like the palms, in a half-wild state, near the villages on the skirts of the forest. In the wilder parts it is called Mahul, but in the purer Hindi dialect its name is Mahuya. It does not grow in any part of the district that belonged to the province of Bengal, and on the north side of the river there are only a very few trees. It grows to be a very fine spreading tree; and thinly scattered over the poorer fields of a red soil, where it seems to thrive best, its shade by no means injures the crops of Sesamum or pulse, which are those that thrive best on such soils. The timber gives tolerable planks,

that are commonly used for making in a little water to dryness. In the southern parts of the district the poor are compelled to derive from this flower a portion of their ordinary nourishment. In common years, for about five months, they use partly grain, partly the Mahuya; but for four or five days in the month they eat the seed of the Sakuya (No. 61). In times of scarcity  $\frac{1}{2}$  of their whole subsistence is derived from the Mahuya,  $\frac{1}{2}$  from the Sakuya,  $\frac{1}{2}$  from the Odail root (No. 132), and  $\frac{1}{2}$  from grain. A few other substitutes are used, as will be afterwards mentioned; but to no considerable extent. All these substitutes are very inferior to grain, and the people, feeding even on the Mahuya, which is the best, become weak and sickly. The fresh Mahuya flowers are boiled in a little water to dryness, and form a pulp, which is eaten cold with a little boiled pulse, if this can be procured. The dried flowers are boiled to dryness, and then beaten to a paste, which is eaten with some parched seed of Sesamum, if this can be afforded.

36. The *Mimusops Elengi* at Bhagalpur is called Maleswari, but in the woods of the south it is called Baul, which seems to be a corruption of the Bakul of Bengal, by which name this tree is known in the Eastern parts of the district. It is not at all common.

37. In the woods of Mungger the Khirin or *Achras dissecta*, W. is very common, and its fruit is sold in the market. Coarse furniture is made of the wood, but even for that purpose it is not thought good.

38. Both at Bhagalpur and in the hills of Kharakpur the *Embryopteris glutinifera* is found, and is called Gab, but the fruit is not commonly used for paying the bottoms of boats. What the carpenters here called Gab is the root of the Palas (No. 133).

39. The Makarkend has been described by Dr. Roxburgh under the name of *Diospyros cordifolia*. The fruit is excessively bitter. The common timber is not much valued, but is used for coarse joiner's work. There is another Makarkend (No. 57) which would appear to have no botanical affinity to this kind.

40. The Kend is one of the most common trees in the district, and has a very strong affinity to the Tupru of Mysore, but neither seems to have been described in

such works as I possess. The fruit is eaten, and, when ripe, is said to be good ; but it is generally brought green to market ; and, to render it eatable, must be heated in a pot covered with embers. The tree flowers in June, and the fruit is not ripe until April. The common timber has the same qualities with that of Makar-Kend, but both, when allowed to grow large, produce a black heart which is called Abnus (*Ebenus*).

At Munger it is not usually procurable, nor by advances is it supposed that above 30 or 40 pieces, from 4 to 6 cubits long, and from  $\frac{1}{2}$  to 2 cubits round, could annually be procured. Formerly it was in request for boxes, but for some years these have ceased to be fashionable, and it is only in demand for chess-men. A piece 5 cubits long by  $1\frac{1}{2}$  round, the usual size, would cost 6 R. Hangrwe in Lakardewani produces the best.

41. The Lodh of this district is of the same genus with the Bongyera of the Ronggopur list (No. 68) that is a Hopea; but it differs somewhat from any species found in the abovementioned district. It is found chiefly in the southern part of the district ; about Munger it is not known.

42. The Kumbhi of Munger, and Kumbir of the southern woods, or Pelou of the *Hortus Malabaricus* (R. No. 70), is pretty common. The cabinetmakers of Munger employ it for boxes. It takes a polish, is of a mahogany colour, well veined, and is not very heavy. It does not resist damp, and splits with the sun ; but, if kept dry, is pretty durable. The physicians of Munger brought this tree as the Jhiti of their vulgar language, which is an officinal.

43. In the hilly parts of the district the Hijal (R. No. 71) is found on the banks of rivers ; and in the marshy woods on the North side of the river it is the only tree that grows. Its timber is considered as of very little value, and it does not even make good charcoal.

44. In the dryer woods of this district one of the most common trees is called Dungruki in Lakardewani, and Karhar near Munger. It is a species of *Gardenia* and approaches so near to the Dhaniya of Puraniya (No. 40) that I am inclined to consider some differences as accidental. Its fruit possesses a saponaceous quality.

Its timber was formerly used for making the drums of the seapoy corps, and it is employed for wooden hoops. It is very flexible, and, on exposure to the weather, does not split.

45. The Popro of the hilly parts of the district is a very common species of *Gardenia*, which I cannot trace in authors. It grows to a good size, but the tradesmen of Munger apply its timber to no use.

46. The Pindar of the southern forests or Pindalu of the cultivated parts of the district that belong to Behar, is the Piralu of the parts of the district included in the province of Bengal, and the *Gardenia uliginosa* of botanists. It is very common. The tradesmen of Munger neglect also the timber of this tree.

47. At Ratnagunj the species of Morinda, called Daru Horidra in Dinajpur (No. 32), was brought to me by the name of Katbela, which must by no means be confounded with the Kayet-bel (No. 71).

48. Very nearly allied to the above and still nearer to the Koreya of Puraniya (No. 42), is the Bankathar of Bangka. The bark of the root is there used for dyeing. The name signifies wild Jak (*Artocarpus integrifolia*), probably on account of the appearance of the wood, but this name is applied by the natives to so many different trees that much reliance cannot be placed on the nomenclature of places even near each other. At Munger a wood called Bankathan is a good deal employed for doors, chests, bedsteads and such like furniture. It does not take a polish and is inferior to the Jak wood.

49. The Kadam of this district is the Kodombo of Ronggopur (No. 80), and is found both in villages and forests, but not near so common as in the eastern parts of Bengal. Its wood is not applied to any use by the tradesmen of Munger, and I suspect is by no means entitled to the denomination *Nauclea*. The timber of two other species of the same genus is more valuable.

50. The Karim, Kurum or Karam, as I found it variously written, is the *Nauclea Cordifolia* of botanists, and in the hilly parts of this district is a very common tree. Its wood, like that of other Naucleas, is yellow has a resemblance to that of the Jak and is much used for doors, chests and planks. It does not take a polish but, if kept dry, is lasting and is strong.

51. The Gulli-Karam or *Nauclea parvifolia* is also very common, and its wood is thought to be better than that of the *Nauclea, cordifolia*, as it takes a kind of polish and is stronger. It is considered as good as the timber of Jak.

52. The Tilai of the woods of Kharakpur is evidently the same name with the Tiliya of Puraniya (No. 45), for the low people who know the names of trees, speak very indistinctly, and the people of rank who take down the names, spell very carelessly. The tree of this district differs a little from that of Puraniya, but belongs to the same genus.

53. Khongta is a species of *Ixora*, which grows to be a tree, and in Dr. Roxburgh's MSS. is on that account called *Ixora arborca*, but in this district alone I have found two other species entitled to the same distinction, and all grow on the hills south from Munger. The tradesmen of that place do not use the timber, but it makes uncommon fine fuel.

54. Another species is called Chhota Khongta.

55. The third kind is called Maruya.

56. Towards the border of Virbhumi I found a tree called there Burha, which has a great resemblance to the last, but having seen neither flower nor fruit, I cannot take upon myself to say whether or not it is exactly the same.

57. In the same vicinity a tree of this natural order of *Rubiaceae* is called Makarkenda, but has no sort of resemblance to the *Diospyros* so called, as I have already mentioned (No. 39). I saw neither flower nor fruit.

58. The same was the case with another tree of the same natural order, which I found in the same vicinity, and which called Putel.

59. Neither did I see the fructification of another rubiacious tree, which grows in the woods near Karariya, and is called Banakangro.

60. The Varuna of this district differs a little from the Vorna of Bengal (R. No. 26), which is the *Crataeva Tapia* of botanists. The Varuna of this district grows at the foot of hills instead of on the banks of rivers. It is not common and is applied to no use.

61. In the woods south from Munger I have found a species of *Garcinia*, each berry of which contains

four seeds. The natives whom I consulted did not know its name, and it is not applied to any use.

61 [A]. The Sakuya of this district is the Sal of Bengal (R. No. 95), and the *Shorea robusta* of botanists. In the southern forests of this district it grows very copiously, but is in general so much stunted, that few beams fit for the floor of a large room are procurable, and it is reckoned of a quality very inferior to the Sal of Morang. The wood of the Asan even is reckoned preferable. A great part, however, of this inferiority is probably owing to its stunted growth, and perhaps to the extraction of its resin (Dhuna). This is one of two gums burnt as incense before the Hindu Gods; the other called Guggul is here considered as an exotic. The Dhuna is a very coarse impure resin, and caulkers use it in repairing boats. The resin is extracted by cutting from the stem about 2 feet from the ground a ring of bark, about 6 inches wide. The resin exudes from the wound, which kills the tree, and is very generally inflicted before the trunk is thicker than a man's arm. The operation is performed towards the end of the rainy season; about a month afterwards the resin is collected, and until the middle of January the same trees give more resin, which is gathered at two or three different times, as it collects. Each man employed in this manner pays a trifle (from 4 to 6 anas) for permission to cut. Each tree gives from  $\frac{1}{4}$  to  $\frac{1}{2}$  ser (80 S. W.) of resin, and in one year a man may usually collect 40 sers, which he does with three or four days labour, but at this rate he destroys about 120 trees. It sells on the spot at about 20 sers (40 lb.) a rupee. The trees, if of a good size, and if there is any demand, are cut and sold; if there is no demand, they are allowed to rot. The number of people employed was stated to be 100 in Bangka, 50 in Tarapur and 200 in Lakardewani; but from the appearance of desolation committed on the woods, each man must either collect from many more trees, or more people must be employed. In Mallepur it was alleged that no resin was made; yet I everywhere saw the trees cut.

The Sakuya is one of the trees on which the Tasar silk worm feeds, and its leaves are the common platters used in the whole district. Some people live by

collecting these leaves and bringing them to the more civilized parts of the country for sale. The usual price at Mungger is 2 paysas or the 32d part of a rupee for 100 plates, each made of 8 or 10 leaves, stitched together with skewers of bamboo.

The seed of the Sakuya is used as a succedaneum for grain by the poor, as I have mentioned in my account of the Mahuya (No. 35). The wings having been separated from the fruit of the Sakuya, it is steeped in water to separate the integuments. It is then ground and made into cakes.

The species of *Citrus* found in the district are as follows.

62. The Batabi Nembu or *Citrus decumanus* is known about places inhabited by Europeans.

63. The Jamini Nembu of Mungger is the same with the Gongra Jamir of Ronggopur (No. 99).

64. The Kagji Nembu of Mungger is the Pati Jamir of Bengal (R. No 101).

65. The Kalamba Nembu of Mungger has oval notched leaves, generally blunt. The petioles are slightly winged. The fruit is oblong, but thicker towards the point, which is sharper than towards the stem, and is marked with many obtuse longitudinal angles. It grows as large as the Jamiri, ripens in November, and has a fine acid juice.

66. The Karna Nembu of Mungger has seldom any thorns; the leaves are generally long, egg-shaped, sharp pointed, and slightly notched. The petioles have a large wing. The fruit is as large as a citron, is shaped like a pear, but rather sharp at both ends, and is very rough. The juice is agreeably acid. It seems to come very near the *Limo taurinus* of Rumphius, (Vol. 2, page 105) which I imagine is represented in the 3d figure of the 26th plate, for the references to the figures in this part of the work seem to be erroneous. In the plant of Rumph, however, the juice is corrosive, and unfit for eating, which is by no means the case with ours; but Rumph's plant is in a state of nature, and ours is cultivated, which may account for this difference.

67. The Sarbatiya Nembu of Mungger seems to be the *Aurantium acidum* of Rumphius (Vol. 2d, page 111),

Its fruit has the shape and size of a common Lisbon orange, and is slightly acid, without sweetness.

68. The Naranggi of Munger is the *Aurantium sinense minus* of Rumph, (vol. 2 page 113). It is a small sweet orange, the rind of which, when ripe, separates spontaneously from the succulent part. It is neither good nor common.

69. The Anghil of the Munger hills is a small tree like a pomegranate, and is very common, but serves only for firewood. It is the *Camunium javanicum* of Rumphius (vol. 5, page 27), and is therefore the *Chalcas paniculata*, which has of late been usually considered as the same with the *Murraya exotica*, a small shrub, pretty common in our hot houses. I presume, however, that the latter shrub is the *Camunium Japonicum* of Rumphius and if Gaertner's description of its fruit be accurate, the two plants are very different, nor do I think that they can belong to the same genus. On the contrary, there can be no doubt that our tree is exceedingly nearly allied to the *Bergera Koenigii*, which must be considered as belonging to the same genus.

70. The Bel, mentioned in all the districts hitherto surveyed, and the *Cratæva* or *Ægle marmelos* of botanists is very common in the woods and villages, wherever the soil is a stiff dry clay. Its wood is used for the pestle of oil mills, and is very hard, but when exposed to the sun, is apt to split.

71. The Kayet-bel of this district is the Kat or Kot-bel of the districts formerly surveyed (D. 39) and the *Anisifolium* of Rumphius. In the woods of this district it is exceedingly common, but its timber is not used by the tradesmen of Munger.

72. A tree so near to the last that by Willdenow it has been considered as the same species, is the Katow Tsieru Naregam of Rheede (Hort. Mal. vol. 4, plate 14). Willdenow includes both under the name of *Limonia acidissima*, but as the former is evidently of the same genus with the Bel, and belongs to the genus *Ægle*, the name *Limonia acidissima* should be confined to the tree of Rheede. It is a small tree, but its wood is said to be uncommonly strong, and is used for the pestles of oil mills, for posts and for beams. In the woods of Bangka

it is called Titakangta or the bitter thorn, and among the hills of Munger it is by the vulgar called Gira, and by physicians Gaengra.

73. Near the banks of the Ganges the *Melia Aze darach* of botanists is found at villages, and is there called Bakayen, but it is not common. Its wood is light and thought to be of no value.

74. The *Melia azadirachta* here also is called Nim, and is found both in forests and near villages. It is in constant use as a medicine, nor in the language of Hindu science would any tree appear to have acquired so many names. Its timber is used for making the outer rims of cart wheels. A fine pellucid tasteless gum exudes from this tree, and is used by painters and in medicine. By the workmen of Munger it is considered as the best gum that they procure, and as the tree is everywhere exceedingly common, it might perhaps be worth while to endeavour to collect a quantity sufficient to try the European market. A medicinal bitter oil is extracted by expression from the kernels.

75. The Janggali Naranggi or wild orange has no affinity to the genus *Citrus*, and is of the same with the Pithras or Dinajpur (No. 43). Here also it is applied to no use.

76. About the villages of this district the species of *Cedrela* formerly mentioned (R. 114), is found, but is not very common and is called Tunga, while in the southern forests it is called Sisi. At Munger very little is procurable, but it is a wood much esteemed by the cabinetmakers, and takes a fine polish. The flowers are used as a yellow dye. The dry flowers sell at from 3 to 4 anas for the ser of 84 Sicca weight or rather more than 2 pounds.

77. Allied to the above is the tree described by Mr. Colebrooke in the 9th volume of the *Asiatick Researches*, as that producing the gum called Olibanum, but in this district all the people whom I consulted considered its gum as useless, nor, so far as I could learn, is it ever collected. The Sangskrita names mentioned by Mr. Colebrooke for this gum, by the physicians of Munger are considered as synonymous with the Guggul of both the Sangskrita and vulgar dialects, which in this

district is commonly used as incense, but is considered as an exotic production, and in the books which are in the possession of a physician, who now assists me in the investigation of the native officinal plants, no synonyms in the vulgar dialect for the Guggul tree are given, which would seem to imply its being an exotic. It must be also observed that the plant producing the Cundur or Olibanum, as described by the Arabians, has no sort of affinity to this Indian tree. I do not state these circumstances as a clear proof that this is not the tree which produces the Olibanum. The natives, especially those of science, are very imperfectly acquainted with the natural productions of their country, and the druggists of Mungger may procure Olibanum from a distance while it is growing abundantly at their door. I however think that the matter requires some farther examination. Near Mungger the tree now in question is called Salhar, in the forests of Tarapur it is called Salai, and in those of Bangka it is named Sondar. It is one of the most common trees in the district, and not only its resin, but its timber, is totally neglected.

78. In the forests of this district a small tree named Pangdan is very common. It belongs to the same genus with No. 116 & 117 of the Ronggopur list, but differs a little from either. I have not heard of its being applied to any use and think the name doubtful as the man who gave it was uncommonly stupid.

79. The *Hibiscus populneus* is found in villages, and I suspect is exotic, as by a strange circumlocution it is called the Paras pipal, that is the *Butea frondosa* resembling a *Ficus religiosa*.

80. The Bakam of the southern parts of this district is the *Pterospermum suberifolium* of botanists (P. No. 54), which only grows about villages. It must be observed that in Bengal this name is given to the *Cæsalpinia Sappan*.

81. The Guyagudi of the southern forests belongs to the same genus with the Arsiya of Puraniya (No. 55), but differs in some particulars both from it and from another species which in Mysore is called Gumsi.

82. The Simal or *Bombar heptaphyllum* of botanists (D. 46) is everywhere very common, and thrives

best on low moist places. This wood is very light and is not durable, but when exposed to the sun, does not split, and is here employed chiefly to make the roofs of palanquins, benches (Tukhtposh) and scabbards of swords.

83. The Bankapasi of the Tarapur woods is a small tree, the *Helicteres Ixora* of Willdenow. In the woods of Munger it is called Aynghamora and Aynghajuthi.

84. The Telhai of the Bangka forests and the Kaundhi of Tarapur is the *Sterculia urens* of Dr. Roxburgh, and is a common tree, which grows to a large size, and in the woods is remarkable by having its outer bark divided into very fine leaves, somewhat like that of the birch. At Munger this tree is known by the name of Karamgulli, and is used in medicine.

85. In the hills of Munger I have found another species ornamented with red flowers, and which may be the *Sterculia colorata* of Dr. Roxburgh, although it does not entirely agree with the account given of that tree in the Encyclopedie. The native name is Phulka. Its wood is in no request.

86. The *Michelia* of botanists is called Champa, and in this district is not at all common.

87. The *Dillenia pentagyna* (R. No. 125), near Munger is called Banchalta. Its timber is in no request. In the woods of Bangka I found in leaf a *Dillenia*, which was called Agui, and which seemed to me to be the same, but in this genus, without seeing the flower and fruit, no one can be certain of the species.

88. In the cultivated parts of this district the Ata of Dinajpur (No. 49) is called Surifah, and in the woods of the south the name given to it is Mandargom.

89. Here, on the contrary, the name Ata is given to the Lona of Dinajpur (No. 50).

90. The Hiran of Munger is a species of *Uvaria*, which I cannot trace in authors, but which I have seen in the kingdom of Ava. In the woods of Bangka it is called the Chhota Gandhai. It must be observed that in these latter woods a very different tree is called Hiran (No. 187). The wood of the Munger Hiran is considered at that place as the best fitted of any that they possess for the use of the turner, and is employed for everything that these artificers make.

91. In the same woods is another species of *Uvaria* which I cannot trace in authors. Its wood possesses exactly the same qualities with that of the last mentioned tree, and is equally employed. It is called Gandhai or Gandhana Hiran.

92. In the woods of Bangka I found a tree called Gandhai, which seemed to me to be the same, but in a genus, the species of which are so difficult to ascertain from the leaf alone, I cannot take upon myself to say whether it may not be different, for I did not see the flower.

93. The workmen of Mungger have another Hiran that they call Chandana or Lal Hiran, the wood of which is thought inferior to that of the other two, but still is frequently used.

94. The species of *Flacourtia* called Paniyala is found here as well as in Puraniya (No. 64), but only near villages, and is not common.

95. The species of the same genus called Baingchi in Ronggopur (No. 130) and Katahi in Puraniya (No. 63), in this district is called Baingcha and is very common in the woods. The name Baingchi is here given to a very different plant (No. 146), a species of *Zizyphus*. Its fruit, although very wretched, is sold in the markets. In the woods here it grows to be a pretty considerable tree and its timber is used for the implements of agriculture.

96. The *Grewia asiatica* was brought to me at both Bhagalpur and Mungger as the Phalsa, the same name which it has in Puraniya (No. 66), and in the woods of Bangka it was shown me as the Dhaman, but at Mungger the Dhaman is alleged to be different. In that vicinity however I have only been able to find 3 species of *Grewia* that grow to be trees, namely this and the two following, and it is generally admitted that there are three species of Dhaman. I suspect therefore that the workmen confine the term Phalsa to what grows in villages and Dhaman to the same species when it grows in woods. The Dhaman by the workmen of Mungger is considered as a strong timber and is used for axle-trees. It also is exported from Rajmahal.

97. The timber of the Singgiya Dhaman is reckoned still stronger, and this tree seems to me to be

probably the *Grewia arborea* of Dr. Roxburgh's MSS., but I did not see it in all its stages.

98. The Arhanya Dhaman is a *Grewia* which I cannot trace in authors, and like the others, has a strong useful wood.

99. Jhungjhuni of Bhagalpur is the large-leaved *Grewia orientalis*, mentioned by Willdenow, and grows about villages, a small useless tree.

100. The Galgal of Mallepur is in spring a very beautiful plant, being covered all over with large yellow flowers, without leaves. It approaches very near to the genus, called *Stewartia* by botanists, but its seed is wrapt in a kind of cotton. Its wood is in no request.

101. The sandal tree is found near some monuments of saints, at Bhagalpur, and in the common dialect of the place is called by the same name exactly, which the English use. I am assured by a native workman of Munger, that some years ago a tree of this kind grew near Pirpahar in that vicinity, and, having reached to about a span in diameter, was cut, and found to possess a very good quality. This is exactly the same tree with the Sandal of Malabar, which by modern botanists has been called *Sirium myrtifolium*, although it no doubt is the tree which gives the most common and valuable sandal of commerce. There is however great reason to believe that the *Santalum albumtimorense* of Rumphius (vol. 2, plate 11), considered as the *Santalum album* of Linnæus is a very different plant, as to judge from the figure, it would seem to have pinnated leaves, and Rumphius says that the Malabar Sandal is harder than that of Timor, and the two were evidently by him considered as distinct species. It seems extraordinary that, after having seen Dr. Roxburgh's accurate description, Willdenow, respecting the flowers of this plant, should continue in all the errors of the younger Linnæus. In deference to Jussieu I have placed it in this part of my work, but I think that in fact it belongs to the natural order of *Thymeliea*.

102. Throughout the southern woods of this district the Thanki is a very common tree, and the Tasar silkworm naturally feeds on its leaves, but its timber is not in request. It is also used in medicine, but the

names, even in what the physicians call the vulgar dialect, usually differ from those of the multitude, and they call this plant Nilhar. It is certainly the Kasjavomaram of Rheedee (*H. M.* vol. 5, plate 19) and probably is the *Memecylon ramiflorum* of the Encyclopedie, although it does not entirely agree with the description given in that work. Why Willdenow has chosen to call this *Memecylon tinctorium* I cannot say, as he quotes the species mentioned by Burman as a dye for his *Memecylon umbellatum*.

103. In the woods of Munger I found the tree, which at Ronggopur (No. 137) was called Bonkangthali, but the people here have given it no name. It approaches very near to the genus *Alangium*, but has a berry in place of a drupe, and opposite instead of alternate leaves.

104. The *Alangium tomentosum* of the Encyclopedie in the woods of this district is a very common tree, and grows to a considerable size. Its wood is not in request, but it is an officinal plant. In the vulgar dialect it is called Dhela.

105. The Sidda of the Southern forests of this district is the species of *Lagerstroemia* which, in the Dinajpur list (No. 58) is mentioned under the name of Nichom. It is very common, and the Tasar silkworm is often found on its leaves, but its wood is in no request with the workmen of Munger.

106. The *Psidium pyrifera*, in the Hindi dialect of Bhagalpur, is called Amrudphal, and is not near so common as in the Eastern parts of Bengal. Mr. Glas, the surgeon, who probably cultivates it with care, speaks of it as a good fruit.

107. The *Jambulana* of Rumphius has, in former accounts (D. No. 56, P. 142) been amply mentioned, and as usual forms the prototype of an Indian genus called here Jamun or Jam. It is therefore usually called by these names alone, but some add the specific name Phalenda. It is pretty common and is used in planks for supporting the sides of wells, as it is considered as very durable in water.

108. In the woods of Munger I have found a species of *Calyptranthes*, called Kat Jamun, very much resembling the former. The name implies the wild

Jamun, which is also the meaning of the Janggali Jamun mentioned in Puraniya (No. 69), but the trees would seem to differ. The wood is not in request.

109. In the woods of Bangka I found, near the banks of torrents, a species of *Calyptranthes*, called Dauka Jamun, which perhaps may be the same with the Kat Jamun of Munger, but I saw neither flower nor fruit.

110. In the same woods I saw still another species of *Calyptranthes*, but in the same imperfect state with the last. So far as under such circumstances I can judge, it seems to be the same with the Keoya of Puraniya (No. 70). The people of the woods say that they eat the fruit. It is called Tatno.

111. The Pomegranate is here called Anar, is pretty common, but very bad.

112. The apple-tree grows in a few gardens, and produces apples, little larger than a nutmeg, and not absolutely so bad as crabs.

113. In the gardens of Europeans the peach is common, and there are a few in those of the natives. It by no means thrives so well as in Bengal. It is too late of ripening, so that the showers of spring usually rot one side, while the other is green.

114. The Mimosas form here a larger proportion of the woods than towards the east, and I have found 7 species that grow to be trees.

115. The Siras or Sirish is the prototype of a subdivision of this genus, all of which have doubly pinnated leaves, and the leaflets rather large. It grows both in villages and woods, especially on the banks of torrents. It is the Sirish of Ronggopur (No. 149) and its wood is in great request for carts, the best of which are constructed entirely of this material.

116. In the woods of Bangka two species are included under the same name, the one last mentioned and the Jati-koroi of the Ronggopur list (No. 151). So far as I can learn, there is no difference in the qualities of the timber.

117. The Janggali Sirish of the parts bordering on Virbhumi differs a good deal from the two above mentioned trees, and is the same with the Biluara of the

South of India, which I have mentioned in my account of Mysore.

118. The Kangta Sirish of the same vicinity differs from the three last mentioned species in being prickly.

119. The Khayer, or *Mimosa Catechu* of this district, exactly resembles that which I saw in Ava, and differs in a few trifling particulars from the tree of Morang, which gives a similar drug. The wood is of no use, except as yielding this extract, and in this district the roots seem as much used as the stems. The number of trees is very great, especially in arid barren places, in which chiefly it seems to delight; but it is here very rare to find a tree of it so thick as the arm, which would seem to imply, that the quantity of Catechu prepared was very considerable. This however is most strenuously denied, and no doubt the manner in which the trees and roots are mangled tends to destroy a vast quantity without producing much drug. It is only the red wood that is of use, and in the small sticks and roots that are usually cut, the quantity of this is very trifling. If a space of wood containing 100 or 200 acres were allowed to grow for 20 years, the trees would be of a good size and very little labour would be required to make much more drug than is now procured. At present a vast quantity of labour is wasted in searching for little sticks and roots, so that a man in Tarapur is said to make only from 20 to 40 sers (88 S.W.) in a month, that is from about 45 to 90 lbs. We may however take the latter rate as the real quantity, for at the rate at which it is sold to the trader (from 1 to 1½ sers of rice for one of Catechu), if they made less, the people could not live; and I presume the latter price is the most common, leaving the merchant an enormous profit, as 1½ man of rice this year when very dear, costs 2 R. and the man of Catechu now sells at Munger for 6 R. Accordingly it was stated that no less than 100 traders employed themselves in making advances to 1000 workmen. The Catechu made here is very inferior to that of Morang, owing partly to the slovenly manner in which it is prepared, and partly to a general practice of adulteration. The chips are boiled in small earthen pots,

until the Catechu is extracted, and the decoction is then inspissated in a separate vessel, and poured thin on a bed of leaves, where it is allowed to dry. It is then beaten in a mortar with a little warm water, and formed into balls, during which operation, a kind of earth, called Makar Mati, afterwards mentioned, is generally added to about one-fourth of the whole weight. A little called Papri is made into small cakes, without adulteration. The people work from Kartik to Phalgun (middle of October to middle to March), but an interruption of two months at least arises from the rice harvest, so that each man may make 3 mans or 270 lb., worth to him 6 Rs., and to the exporter 18. The maker pays a rent of 4 anas a year, one-half for permission to cut Khayer, and one-half for permission to cut fire-wood.

The following statement was given of the number of people employed.

Bangka	1000	men
Lakardewani	150	
Tarapur	100	
Mallepur	100	

1350 who may make

about 4000 mans, but it is probable that in the two last districts the numbers stated were very much diminished and that the number of men employed is not less than 2000, who make 6000 mans of drug.

120. The Babur of this district is the same with the tree so called in Puraniya (No. 73). Its wood is much sought after for carts, especially for the naves of wheels. The gum is sold by druggists, but in very trifling quantities.

121. The Guhiya Babur has also been mentioned in my account of Puraniya (No. 74). Its wood is very inferior to the other, and it does not grow to such a large size.

122. I have nothing to add to the accounts of the Tamarind already given (D. No. 84), except that everywhere south from the Ganges, it is very abundant, especially in the woods, where it seems to be spontaneous, but the monkeys are so fond of the fruit that very little can be secured. The fruit, however, is in so little demand that the trees which grow in the villages give no

return. The timber is in no request among the workmen of Mungger, who allege that it is very liable to split. In the vulgar Hindi it is called Tetul, but in the language of men the physicians consider Imli as the proper name.

123. The *Cassia Fistula* in this district is called Amaltas, and Bandar lauri. Its wood is applied to no use. The fruit is used as a purgative.

124. At Mungger the *Parkinsonia aculeata* has been introduced among the Europeans, and has thriven in a most surprising degree.

125, 126, 127. The *Bauhinia purpurea* of botanists, in the vicinity of towns, is called Kangchnar and in the forests Koenar. It is a small tree of little use, but is exceedingly ornamental. Under the same name are included also both the species of *Bauhinia* mentioned in my account of Dinajpur (No. 70 and 71). The flowers of all, before they expand, are used as a common vegetable.

128. The species of *Bauhinia* called Bhakuri in the Ronggopur list (No. 160) seems to me to be the same with that which in the woods of Bangka was called Jhingji, but I saw this tree only in leaf, and cannot therefore be certain.

129. The Mahola of the woods of Mungger is a similar tree and may perhaps be the same with the Jhingji, but having seen the flower, I know that it is different from the Bhakuri, nor can I trace it in botanical authors. It grows to be a middle sized tree and its timber is used for coarse joiners work, and is reckoned strong and durable.

130. At Bhagalpur the *Erythrina indica* (D. 74) is called Pharhar, but is not very common.

131. In the forests again of Kharakpur, one of the most common trees is called Pharhar, but is a different species of *Erythrina*, which Dr. Roxburgh in his MSS. accounts calls *alba*. It is however not at all the *alba* of Willdenow. In the parts of the district bordering on Virbhumi, it is called Mandar. The wood is in little request except for covering palanquins and for saddle trees, being very light.

132. A tree strongly resembling in habit the *Erythrinas*, was brought to me by the name of Pangdan

but it must be observed that another tree of the same name has been already mentioned. The resemblance of the foliage was so great that, until I saw the flowers, I had no doubt of its being an *Erythrina* but afterwards I found that it approached nearer the *Glycine*, though it can scarcely be thrust into that genus, it is a fine tree, and like that which will be next mentioned, has a kindred species that is an immense climber.

133. The name of the *Butea frondosa*, which in Bengal is pronounced Palas (D. No. 75), is here called Paras. It is very common in the woods on both sides of the Ganges, wherever the soil is rich and moist, without being liable to inundation. Its bark is beaten to a kind of oakum, which is used for caulking boats, and is here called Gab and Rasawat. Its timber is useless. In the woods as will be afterwards mentioned, it is reckoned the best tree for rearing the Lac insect.

134. The Paysar of Kharakpur, on the borders of Virbhumi is called Murga. I have only seen it in fruit, but so far it agrees entirely with the description of the *Pterocarpus Santalinus*, W., which I took in the south of India, except that in each fruit it has only one seed, whereas the other has usually two. I do not however doubt but that it is the same tree, as it is remarkable for its bark containing a juice like blood. Willdenow considers his plant as the true red Sanders, but this, I think, is exceedingly doubtful. It is held in no estimation by the workmen of Mungger, who use it only for coarse work, although it is one of the largest and most common trees of the district.

135. The Chhagalnadi of the Mungger woods is a *Dalbergia*, which I cannot trace in botanical authors. It is of little or no use, but seems fitted for all situations. I have found it amidst the parched rocks of Mungger, and on the half drowned banks of Dhaka.

136. The Satsal is reckoned the most valuable timber in the district, and is that chiefly employed by the cabinet makers of Mungger. I have only seen it in leaf, and so far it agrees with the *Dalbergia latifolia*, W. The timber admits of a good polish, resembles very dark mahogany, and is durable, but it is very heavy, is little ornamented with veins, and planks sufficiently broad for

making tables without joinings are not procurable. It makes however very good chairs, couches and beds. The size of the logs commonly procurable is from  $1\frac{1}{2}$  to  $2\frac{1}{4}$  common cubits round and from  $5\frac{1}{2}$  to 6 cubits long. At Mungger the price of those which are  $1\frac{1}{2}$  eight round is usually  $4\frac{1}{2}$  R.; those 2 cubits round sell for 6 R. It is only a few parts of this district, chiefly Hangrwe, that produce any of a size fit for use, and most of what is employed comes from the adjacent parts of Ramgar.

137. In the forests of this district the Bhela or Semicarpus is abundant. It is supposed, that some people if they approach this tree, are liable to sores and tumours; but the opinion is accompanied by several ridiculous circumstances, which render the whole suspicious. The fruit is sold in the markets as a medicine, and for staining linen. The timber is only applied to the most coarse purposes.

138. I have already mentioned that the Mango has been extended beyond all reasonable bounds, so that the produce of a bigah ( $\frac{1}{3}$  acre) planted with these trees, and containing perhaps 20, is not in general estimated at more than 2 or  $2\frac{1}{2}$  Rs. In general the fruit is very bad, and it is late of ripening, so that the season is short. Much of the ripe juice is preserved by drying it in the sun. This preserve is here called Amawat. Green mangoes are also preserved by cutting and drying them in the sun; this preserve is called Khatai. A few are made into Achar; when green they are split, stuffed with salt, and with mustard and aniseed, and then put in mustard-seed oil. The wood is in much request for packing-boxes, doors, chests, and other coarse work, but notwithstanding the numerous plantations, and that there are many old trees of great size, the wood can scarcely be procured, as the Zemindars, especially about Mungger, will not consent to their being cut, which seems to be out of mere perversity. The reason for this assigned by the natives is, that when many troops were at the place, and no firewood could be procured, the Zemindars being then bound to furnish it without payment, it became necessary to cut some of these trees by force, and ever since the Zemindars will not voluntarily consent that any should be cut.

139. The Buchanania mentioned in the Dinajpur list (No. 80) is found in this district, together with another species, the leaves of which are hairy on the under side. Both are here called Piyar or Piyal. At Munger its wood is in little demand, and is only used for coarse bedsteads, but in the eastern parts of the district it is in greater request, and is exported. The pulp of the fruit is eaten, and the kernels are used like almonds, but it is the fruit in pulp alone that is here brought to market; in Ava the kernels are most in request.

140. In the parts of Kharakpur that have been cleared, the Jiyol formerly mentioned (D. No. 81. R. No. 172 & P. No. 90), is known by this name, but in the woods of Bangka it is called Doka, and in those of Tarapur it is called Kasambhar, a name that is given also to the following tree, with which the natives of Ronggopur and Puraniya, as well as those here, confound it, although the resemblance is not very striking. Its wood is in no request. The bark is used in medicine.

141. The tree which at Munger is called Kasambhar, and in the woods of Tarapur is named Parmi, is the same mentioned in former accounts as being considered by the natives as of the same genus with the last (R. No. 175, P. No. 91), but this can scarcely be separated from the *Rhus*, and what I am now describing has a much greater affinity to the *Schinus*, and I have no doubt is the Katow Kalesiam of the *Hortus malabaricus* (vol. 4, plate 33). Its wood is employed in coarse work, being strong, but not durable, nor does it take a polish.

142. The Amsaheri of Munger, or Sahari of Bangka, seems to be the same with the Niyar of Goyalpara (R. No. 174), although I cannot be certain, as I have not seen the flowers of the latter. It seems also to agree very well with the Ben Kalesiam of the *Hortus malabaricus* (Vol. 4, page 71), but Rheede describes neither the flower nor fruit. It is a species of *Schinus* and has a great affinity, if it be not the same, with the *Lansium montanum* of Rumphius (Vol. 1., plate 56). Its timber takes a good polish, and is used by the cabinet makers of Munger for small tables and dressing boxes. Among the forests its fruit is eaten but is not brought

to the market at Munger. The leaves and bark are used by the physicians.

143. The *Spondias amara* is found both in woods and villages, and here also is called Amra. Its wood is in no request, but its fruit is a common acid seasoning.

144. The term Bayer in this district is usually confined to the kind of *Zizyphus Jujuba* which has a long fruit, while the common round kind, that grows wild or nearly so, is usually called Ban or Gol Bayer, but this distinction is not always observed. The long kind does not come to so much perfection as farther west. The fruit of the round kind is not preserved, but is eaten when ripe. Its wood is in no request.

145. The Chhota or Janggali Bayer of this district is a large bush, or small tree, and near the forest villages occupies a great deal of ground, springing up on places that have been cleared of trees and then deserted. It is the *Zizyphus rotundifolia* of the Encyclopedie. The pulp of this is beaten from the stones, formed into little balls and dried in the sun. These balls are used as an acid seasoning, keep about three months and are called Bayer chun or Bayer lime, but I presume it ought to be written Bayer Chur or pounded Bayer.

146. Under the name Baingchi the people of the Munger hills showed me a *Zizyphus* differing so very little from the Barai mentioned in my account of Puraniya (No. 94), that I consider it as a mere accidental variety.

147. The Ghungti or Ghungt is another species of *Zizyphus*, about the same size as the Jujub tree, and exceedingly common in the woods of this district, but I cannot trace it in botanical authors. This is one of the trees on which the Tasar silkworm in its wild state most commonly feeds.

148. The Neuri is a tree common in the woods of Bangka, and is the *Schrebera albens* of Willdenow which, as I have before (No. 28) said, has no sort of affinity with the Schrebera of Dr. Roxburgh. It is not known to the people of Munger.

149. In the vulgar Hindi dialect of this district, where it is exceedingly common, the *Phyllanthus Emblica* of botanists is called Aongla, but in the purer Hindi

used by physicians the name is written Aongra. Its wood is not in request. The fruit is made into execrable sweetmeats and is used in medicine.

150. The Palasi of the woods towards the frontier of Virbhumi has evidently strong botanical affinities with the last mentioned tree, but having only seen it in fruit, I cannot refer it exactly to its proper genus. I have not learned anything of its qualities.

151. The Kadrupala of the woods in Bengka is the *Clutia stipularis* of Linnæus, mentioned in my accounts of the districts formerly surveyed (D. No. 90 and P. No. 191).

152. The Namta of the woods bordering on Virbhumi is another species of the same kind, mentioned formerly under the names Kukurbicha (D. No. 91) and Korchimala (R. No. 192). Its berries are eaten.

153. The Haril of the woods of Lakardewani is a species of Bradleya which I cannot trace in authors.

154. In the woods of Mallepur I found another species of the same genus, for which the people with me had no name. It approaches very near to the *Bradleya sinica* but its leaves are acuminate.

155. The Canshi of the *Hortus malabaricus* mentioned formerly (D. No. 90, R. 194, 195), has here also been confused with the Gmelina (No. 20), under the common name of Gambhar, but here this name is applied to the Canshi by physicians alone by whom it is used, while all those who use the timber of the Gmelina know of no other Gambhar. The officinal plant is found only near villages, while the *Gmelina* is found only in woods.

156. The Rottleria (D. No. 94, R. No. 198) in the woods of Lakardewani is called Rora; in those of Tarapur it is called Abir, from the red powder with which its fruit is covered. This is not used as a dye.

157. Among the forests of this district, but chiefly on the skirts of the villages, the Dude (D. No. 93) or Dudhiya (R. No. 200) is common. In Lakardewani it is called Gote; in Tarapur it is called Poter. Its wood is considered as useless.

158. The *Euphorbia nereifolia* of botanists, called Pat Sij by the natives, is exceedingly common in the dryer and more barren forests of this district, and grows

to be a small tree, of no use but as a fence, to which purpose it is very seldom employed.

159. In this district the Banyan tree or *Ficus Bengalensis* (D. No. 95) is abundant near villages, but does not seem to be a spontaneous production of the woods. It is called Bar and Barkat. Its wood is used for fuel.

160. The Gadha bar or ass Banyan tree, on the contrary, is very common in the woods. It is a species of fig that I cannot trace in authors, and, like the Banyan, sends roots from its branches. Its wood is applied to no use. The roots are used in medicine.

161. The Itti-are-alu of the *Hortus malabaricus* (part 3, plate 55), mentioned in my account of Ronggopur (No. 213), in the woods of Mungger is called Khota Pipar, from a resemblance to the following tree. I have some doubts whether the *Ficus retusa* of the Encyclopedie may not be this tree.

162. The *Ficus religiosa* of botanists (D. No. 96), is common in the villages of this district, where it is called Pipal or pipar.

163. In Kharakpur the people showed the *Arbor conciliorum* of Rumphius as the Pakar on which the rear Lac, and of which they eat the small figs. This is the tree which in Dinajpur I have called Pakor (No. 97). It is common both in woods and villages.

164. It must however be observed that here, as well as in that district, a great confusion prevails concerning this name, and what was shown at Bhagalpur as the Pakar, was the Achin of Ronggopur (No. 220), or the Tsjakela of Rheede (vol. 3, plate 64), which is common both in woods and villages.

165. On the hills south from Mungger I found a fig tree very nearly allied to the *Ficus glomerata* of Dr. Roxburgh, and called Gular, a name given also to the species described by that industrious botanist, from which this differs somewhat both in appearance and qualities. The figs are about the size of a small apple, and when ripe, may be eaten without preparation, nor are they very bad, only they are almost always filled with a small fly (*Cynips*), which must be removed before they are eaten. Monkeys, bears and deer are exceedingly

fond of this fruit. The two former have greatly the advantage of the deer, as they climb the trees while the deer obtain only what has fallen.

166. The *Ficus glomerata* of Dr. Roxburgh or Yag dumar of Ronggopur (No. 224), in some parts of this district is called Gular, the name given to the last species; in others it is called Baradumar, while the name Yag dumar is there applied to a different species. The fruit is not eaten without being previously dressed.

167. The Yag dumar of this district is the Kusuri of Ronggopur (No. 230). Its fruit is eaten like that of the last species, and it grows commonly in the woods of Bangka.

161. The Kat dumar again of this district is what I suppose to be the *Ficus symphytifolia* of the Encyclopedie (D.No.100), and where the Bengalese dialect prevails it is called Khoska.

169. The *Artocarpus integrifolia* or Jak is in this district called Kangthal, but is not very numerous; however there are everywhere some trees, and about Bhagalpur there are many. A tree in bearing gives from 12 anas to 1 Rupee a year, but the rage in planting is for mangoes. The wood is in much request among the cabinet makers of Mungger.

170. The Deuyo of the Dinajpur list (No.103 and R.232) is common about villages. In the towns it is called Barhal, but in the forests Dahu. Its timber is in no request.

171. The Seora (R. No. 236) is every where common and is called by the same name. Its wood is in no demand.

172. The *Morus macassariensis* of Rumphius is called Tut and is found in gardens.

173. The Papoya (R. No.239) is here called Papita, and is not common.

174. The Chulmuli of the woods of Kharakpur is the *Ulmus integrifolia* of Dr. Roxburgh, and is a tree applied to little or no use.

175. The Tilai of the woods of Lakardewani is a species of *Celtis* with a rough leaf which is used for polishing horn. It is a small tree.

176. The Chamari Tilai of the same woods differs but very little from the *Celtis orientalis*. Its bark is

said to be used by the tanners to make yellow leather, but by this I suspect is only implied that it is a tan.

177. The *Antidesma* called Amri in Ronggopur (No. 249) seems to me to be the same with the Mathasura of Bangka and Tarsi of Mungger. I have here sometimes found it with sharp pointed leaves, but it is readily distinguished by its adult leaves being hairy. Its wood is in no request.

178. The species of *Antidesma* called Kshir in Puraniya (No. 118), is here known by several names. In the woods of Bangka it was called Amtuya; at Mungger the woodmen call it Mamroja, while by the physicians it is named Mangjari Sag. Its only use is in medicine.

These are all the trees which I can refer to the natural arrangement of Jussieu. A few, considered by that great botanist as of uncertain affinity, shall be next mentioned.

179. The *Moringa pterigosperma* of Gaertner, called Sojina in Ronggopur (No. 252.), in the towns of this district is known by the same name. In the woods of Bangka, where it seems to grow spontaneously, it is called Munga.

180. The species of *Samyda*, which in Puraniya (No. 120) was called Bish kat, in the woods of Mungger is called Koniyal and in those of Bangka, Chorchu. Its wood is in no demand, nor is it known to those whom I consulted that its fruit stupefies fishes. It is properly an *Anavinga*, being of the same genus with the tree so named by Rheedee, and differs a good deal in structure from many of the *Samydas*.

181. Belonging to the same genus, so far as I can judge from having seen the tree only in fruit, is the Lohajang of the Mungger hills, the wood of which is used for coarse furniture.

I shall now mention some trees which I saw in too imperfect a state to judge of their botanical affinities.

182. The odail of Bangka, which I did not see, was said to be a tree, the root of which is said to be used in times of scarcity. The roots are dried and cut into small pieces, parched and beaten in a mortar to separate the fibres. A powder remains, which is mixed with water and eaten with salt.

183. The Harmu of the woods of Bangka is a tree which has the appearance of a *Schinus* with alternate pinnated leaves and no stipules.

184. The Ruhens of the same woods has leaves as above, but abruptly pinnated. According to the natives, the fruit is as big as the fist and contains wool, from whence the name is derived.

185. The Sanamjor of the same woods has alternate subcordate leaves and no stipules. The fruit is said to be esculent, and it may probably be a *Diospyros*.

186. The Kumti Bel of the Munger hills I have seen in fruit, and this has no doubt a considerable general resemblance to that of the Bel or *Aegle*, but the seeds have a perisperm and the leaves are simple. The wood is in no request.

187. The Hiran of Lakardewani seems very different from that of Munger above mentioned (No. 90), and seems from its leaf to be rather a *Tomex* than an *Uvaria*. Its fruit is said to be esculent.

188. The Gidha of the same place has somewhat the appearance of a *Laurus*, having entire leaves, sometimes alternate, and sometimes opposite or collected at the knots of the branches, and no stipules.

189. The Jugiya of Bangka is a tree with alternate cordate leaves having much the appearance of an *Uvaria*.

190. The Dhaos of the hills of the northern tribe of mountaineers is very different from the Dha before mentioned (No. 15), but it may belong to the same genus. It must be observed that the *Grislea tomentosa*, a most ornamental shrub very common in this district, and which has no sort of affinity with either tree, is also called Dhaos. The timber of the Dhaos tree is exported from Rajmahal. From Kalikapur some flowers called Jajki are exported as a dye, and are said to be those of the Dhaos, but of which of the plants so named I have not been able to learn.

191. The Bhorkund I have seen in fruit, and this has a strong resemblance to that of a *Swietenia*, but this tree, one of the most common in the woods of Kharakpur, has opposite simple entire leaves. Its wood is very light and in demand for palanquins.

192. The Pitangjira of Puraniya (No.122) is found near Mungger and is an officinal plant. It is here also called Pitangjira.

I shall defer giving an account of the operations of the wood cutters until I come to treat of commerce.

I now proceed to enumerate the reeds, and in treating this subject I have still less satisfaction than in any former district, as when I visited the country few of them were in flower, and Mungger, where I passed the rainy season, was not a station convenient for the investigation.

Few or none of the high lands of this district are covered with what can be properly called reeds, if we except the bamboo, but in the woods there are many places that produce long coarse grasses, that will be mentioned in the following list, and of the 461 square miles, stated in the 1st Table to be occupied by reeds, pastures or deserted fields, perhaps 300 miles produce such grasses. Of the 548 square miles of inundated land, stated to be occupied with reeds, bushes and trees, perhaps 300 may be occupied with the first, and these grow to a more considerable size than on the high lands, but they are very far from attaining the stately growth which they have in the eastern wastes of Ronggopur. In the present state of agriculture, however, the whole are of some importance, although in general they are in such quantities that they cannot be sold by the owners of the soil, and their only value, when brought to market, is the trouble of cutting and carriage. Vast advantage would arise from their total eradication, and those that were necessary might be cultivated in hedge rows, as is done in some parts of Puraniya, but in this district I did not observe any such. The property in these plants is sometimes separated from that of the soil on which they grow.

1. The Kus or *Poa cynosuroides* (D. No.1) is everywhere common, and many mats for bedding and for covering goods in boats or in storehouses are made of its stems. It is allowed to be a sacred plant, but its mats are not so much used in religious ceremonies as in Bengal.

2. There is a reed called Kasiya or Kas, which is probably the same with the Kesi or Kas, mentioned in my account of Puraniya (No. 15). The root is sweet. At Mungger the Kas, when in leaf, is used for thatch, but

it is very bad, and lasts only one year. The young leaves afford a very good fodder (Kasela) for elephants. I presume that the Kasar of some parts of this district is the same. The stems or reeds, when the Kas flowers, are called Khari or Kharui or Dhuri, because they are hollow. In Puraniya I heard of this as a distinct species (No. 9), but the terms Khari and Kharui are applied also to the reed of the plant that will be next mentioned, nor do these terms apply to any one species more than another, as I was led to suppose in Puraniya (No. 1). The reed of the Kas is used for writing, for making dry fences or screens round houses, for the walls of houses, and to lay over the frame of the roof before it is covered with thatch, mats not being in use here for that purpose. The Rarhi in this district is considered as a different species, but as I have mentioned in my account of Puraniya, it seems to be the same plant stunted by growing on high land, which in inundated places is called Kas.

3. The Sar, Sarpat or Sarkand of the district I presume are the same. The Sarpat of Ratnagunj which I had an opportunity of examining, is a species of *Saccharum*, differing in so few particulars from the Kangra of Puraniya (No. 6), which may be the *Saccharum bengalense* of Willdenow, that I cannot consider it as of a distinct species, although it only grows to half the size; but then at Ratnagunj it is spontaneous and in Puraniya it is cultivated. The Sarkand of Mungger, which I presume is the same, grows on the islands of the Ganges. Its leaves are not used. The reed or Khari is used for fences, for the walls of houses, and for the screens (Janggha), which the fishermen often use in place of nets, and is thicker than that of the Kas, but cannot be called Dhunghi as it is not hollow. The upper part of the stem, which supports the elegant spike of flowers, is called Muj. This is split, dried and made into ropes, with which coarse bedsteads are interwoven, and which are used for tying together the frames of houses, but these ropes are very inferior to the Sale that will be afterwards mentioned. The Muj of Puraniya (No. 12) would seem to be different, as the plant of this country is probably the same with the Sarpat of that district (No. 13).

4. The Ikiri of this district is, I presume, the same with that so called in Dinajpur (No. 8) and Puraniya (No. 2), but I have had no opportunity of ascertaining this. Its leaves are occasionally used as thatch or for covering the frame before the thatch is laid on. The reed of this plant also is called Khari, and is much used for walls, for fences, for putting under thatch and for betel-leaf gardens.

5. The Gorghini of this district is a small reed which is most commonly used for making pens, and is said to have a strong resemblance to the Kas. It grows on the inundated banks of the Ganges, but only where the soil is clay, while the Kas grows chiefly on sand, and at any rate does not thrive on clay. The reed the Gorghini is used also for walls and fences.

6. The Sen is a small reed which grows on high land or hills, in woods. It is used for the fences betel-leaf gardens.

7. The Nal or Narkat is, I presume, the same as in Puraniya (No. 22). It is very plenty in the parts of the district that belong to Gaur and Mithila and is there made into mats, which in every other part of the district are very scarce.

8. The Dabhari or Ulu (P. No. 16) is the most common and best thatch in this district. In Bengal Ulu is the only name given to it, but in Magadha the growing plant is called Dabhari, and it is only cut portions of it that are called Ulu. In Fayezullahgunj I heard of a Bongga Dabhar, which is probably one of the species usually included under the name Dabhar.

9. The *Andropogon*, which produces the sweet smelling root called Khaskhas (P. No. 18), is here also very common, and the use of the root has been introduced by the Europeans, but is seldom, if ever, adopted by the natives. In the Hindi dialect the leaves are called Katra, and are much used for thatch, but are very inferior to the last mentioned plant; the two kinds are however often intermixed, which seems to be a very bad economy. The stems in different states are called Bena, Birna and Siki, the first in the Bengalese, the two latter in the Hindi dialect. They are used for making baskets, brooms, the walls of houses and fences. In Gogri

I heard of a reed called Sikri, and in Ratnagunj of Sikra (P. No. 20), which I presume are the same with the Siki, because Siki or Birna were not mentioned there, and the plant I know is common, and in Kodwar Birna and Sikar were said to be synonymous.

10. The Siyata of Puraniya (No.19) is found in the part of Gaur belonging to this district.

11. The Sabe of Puraniya (No. 29) is a species of *Ischoemum*, that grows spontaneously among the hills of this district, and is in great request for making ropes with which bedsteads are commonly interwoven, and with which the frames of houses and fences are tied. If kept dry, it lasts long, but exposed to the wet, it decays in a few months, and is vastly inferior to the rope made of *Corchorus*. The plant delights in a stiff red soil, and this, broken by its roots and softened by an admixture of vegetable matter, forms a fine red smooth clay called Sabe mati, which the natives use in washing their hair and think that it increases the quantity of this natural ornament. In most places those who collect Sabe for sale pay a rent or share to the Zemindar.

12. The Jorgura of Lakardewani is also called Surbal, and is said to be used for thatch.

13. The Patra of the same place is used for the same purpose. I suspect that these two plants are the Dabhari and Katra (No. 8 and 9), as these were not mentioned among the thatches used in Lakardewani, and no doubt grow there.

14. In the parts of the district included in Gaur, the Patiyal (P. No. 21) is a common reed, but here also I had no opportunity of examining it.

15, 16. In Kodwar the walls of the wretched hovels named Maruka are often made of two reeds called Khikro and Reheta; but I did not see these growing. The former may be the Ikiri, which was not mentioned as growing in that division.

17. The Murla is the common thatch of Mallepur and is probably the same with the Dabhari of other parts, a name which was not known to the people of Mallepur.

18. The Jurgur or *Andropogon contortum* of botanists is a coarse grass, which is used by the people of

Mallepur for thatch, and grows abundantly on their hills.

In this district mats are seldom, if ever, made of the stems of *Cyperi* or *Scirpi*.

I now proceed to mention the wild plants that are occasionally used in the diet of the natives, and here a new and more important head offers, namely those which in times of scarcity are used as a succedaneum for grain. These are as follow.

The Mahuya (see Trees, No. 35).

The Sakuya (see Trees, No. 61).

The Odail (see Trees, No. 182).

The Chehar or Tehar is perhaps the greatest twin-ing tree (*Funis silvestris*, Rumph) of India, often exceeding a foot in diameter, and involving many trees in its grasp. It is a species of *Bauhinia*, of which I find no traces in authors. The legumes are roasted in the ashes, and the beans eaten. The leaves, being very large, serve as platters; and strips of the bark are used for ropes and bow-strings.

#### PLANTS OF THE KIND CALLED TARKARI

Pindalu or Piralu (see Trees, No. 46).

Kangchnar or Koenar (see Trees No. 125, 126, 127).

Gular or Bara Dumar see Trees No. 166).

Yag Dumar (see Trees No. 167).

Kat Dumar or Khoska (see Trees No. 168).

Kangkori, the *Momordica dioica* W., which both grows spontaneously in the forests, and is cultivated. The wild kind is as good as that of gardens, and is much used. The root resembles a yam, but is not esculent.

The mountaineers eat wild yams (*Dioscoreas*); but such are not in use at Munger, nor had I an opportunity of ascertaining the kind that the mountaineers use. The only wild kind, however that I saw in the district was the Mukelengu of Rheeede (Hort. Mal. vol. 8, plate 51), which has roots as long and thick as a man's arm.

#### PLANTS OF THE KIND CALLED SAK

Helangcha, the *Jussiaea repens*

Kalmi, *Convolvulus repens*

Kurila

Kongral

Bathuya, a *Chenopodium* (see Dinajpur list)

Gendhari, Gidhari or Gendari, *Amaranthus*

Susani or Sarongchi, *Marsilia quadrifolia*

Dhengkiya, *Asplenium* (see Ronggopur list).

#### PLANTS USED FOR ACID SEASONING.

Amra (see Trees No. 143)

Imli, Tamarinds

Chhota Bayer (see Trees No. 145)

Barhar (see Trees No. 170)

#### WILD FRUITS EATEN RAW

Bel (see Trees No. 70)

Kayet Bel (see Trees No. 71)

Paniyala (see Trees No. 94)

Baingcha (see Trees No. 95)

Kadam (see Trees No. 49)

Jamun (see Trees No. 107)

Kend (see Trees No. 40)

Khirini (see Trees, No. 37)

Phalsa (see Trees No. 96)

Gular (see Trees No. 165)

Piyar (see Trees No. 139)

Aquatic plants eaten raw are almost entirely confined to the part of the district which formerly belonged to Gaur.

Chaka

Makhana

Singgara

Kesur

}

See Puraniya list

I have not seen the Makhana, if it be the prickly plant alluded to in the above mentioned list, and doubt much that it is not found in this district, but Chaka Makhana are so united in the technical phraseology of Bengalese scribes that they are considered as forming one word, and are written wherever a rent is paid for either. The leaves of the *Nelumbium* at Munger are called Purayen, and formerly they covered a lake near Sitakunda. They were in great demand for platters; but now the lake has mostly dried up, and the plant has died. The flowers were there called Kamal, and the

fruit was called Bhengt, but the people of the vicinity admit of another Bhengt, a species of *Nymphaea* mentioned in my account of Puraniya.

While writing this account, I have made some progress in ascertaining the officinal plants and other articles of the *Materia Medica* used by the native physicians, who are in this district more learned than usual. I have engaged a Sakaldwipi Brahman to give me a copy of the treatise on the subject which he uses (*Drabyagun*), and to show me all the substances which that mentions, and I have engaged him and other people to procure me as many of the plants as possible in a state proper for ascertaining their botanical affinities and designations; this is, however, a work of very considerable labour, and is yet very far from complete; nor does it proceed in a manner very satisfactory, as the physician is far from having a very accurate knowledge of herbs, and the people commonly employed by the druggists as collectors, as well as the druggists themselves, are most deplorably ignorant. I shall therefore for the present avoid detailing what I have learned on this subject.

With regard to plants used for various purposes, I shall only make the following remarks:—

1. The Ban Haridra is undoubtedly a species of Curcuma, but which, as I have not seen it in flower, I cannot take upon myself to say. It grows in the woods of Kharakpur, and some starch, like that of the arrow-root, is prepared from its roots, and is here called Tikhur, and is an object of commerce, although I am persuaded that some of many thousand acres in the Ronggopur district contain more plants fit for the purpose than the whole woods of this district. The people who make it, for permission to dig the root, pay a trifle to the owner of the woods. It was said that in Lakardewani 50 persons employed part of their time in this manner, 200 in Bangka, and in Tarapur perhaps 50. In Bangka it is made in Kartik and Agravayan, or from the middle of October to the middle of December. The makers bruise the fresh roots very fine, by rubbing them between two stones, and throw 1 ser of the bruised root into 4 sers of water. After standing all night, what subsides is a fine white starch, and the water is decanted.

The starch is eaten by the rich with milk and sugar, and some of it is dyed red and used in the celebration of the Holi. Each man may annually make about 10 sers.

2. The seed of a plant called Biring, which grows in the Rajmahal hills, and strongly resembles black pepper, is exported for the purpose of adulterating that commodity. I could not procure the plant, and do not know whether or not it is a species of pepper, although this is probably the case.

3. The Tairi of this district ( Taiyar P. ) is a small species of *Guilandina*, which in Dinajpur is called Changmaloti and Gaukungchi. Very considerable quantities of its fruit are collected for the use of dyers and tanners.

4. The Sola or *Aeschynomene*, mentioned in my account of Dinajpur, is found in the idundated parts of the district, and is used for making ornaments. The fishermen prefer gourds for floating their nets.

5. The Mehendi or *Lawsonia* is used for staining the nails, as in the districts hitherto surveyed.

6. The Kandri is the root of a *Scilla*, which the weavers boil and bruise to extract a starch which they apply to their warp.

7. I have already mentioned that the bark of an immense twining *Bauhinia* is used for making strings and ropes. The same is the case with another similar plant.

The *Butea superba*, which is here called Chungti, and in spring is the greatest ornament of the forests. The seeds give an oil, which among the forests is used both for the lamp, and for anointing the body. They are parched before the oil is expressed. The Lac insect is sometimes reared on it.

8. The Raingdhuing of the forests is the *Ventilago maderas-patana* of botanists, another very considerable twining tree. From its seed also the poor express an oil, which they both burn and eat.

9. The Jhengti is a species of *Convolvulus*, of which no account has yet been published, but the late Mr. Roxburgh carried some plants to the botanical garden of calcutta, and it has been described, I believe,

by his father. Its bark is used by the hill tribes and people in their vicinity for bow strings and for beads, and it is remarkably strong.

10. The Keruya is a climber of which the people of Gogri make ropes that serve to tie together the frames of their houses. I did not see the plant, but think that it must be different from any of the former, none of which I saw in that part of the district.

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## CHAPTER 3rd.

### MINERALS.

It is not my intention to enter here into a full description of these, nor into long disquisitions concerning their origin and changes: I shall only mention the most remarkable appearances, point out where different minerals are to be found, especially such as are most useful, and give an account of the purposes to which they are applied by the natives.

The country respecting its minerals, may be divided into five remarkable spaces. 1st. The Rajmahal range of hills, extending from a little below Kahalgang to Udhawanala along the Ganges, and from thence south to the extremity of the district. 2d. The Munger range, beginning with a narrow point at that fortress, and stretching towards the south into the Ramgar district; but from its centre it sends towards the east a long chain, which is of the same nature, and reaches to Jathaurnath. The hills of Gidhaur are of exactly the same mineral appearances. 3rd. The space included between the two former ranges, and south from the above-mentioned chain, that is sent East from the Munger hills. 4th. The space north from the same chain. 5th. The space on the north side of the Ganges, which consists entirely of earth and clay, and in this part of the report requires little or no attention, as it differs in nothing remarkable from the adjacent parts of Puruniya already described. I may only observe, that there, as well as in most low parts of the district, a black clay fit for the potter's wheel is abundant, and in many parts the vessels made of such are strong, and considered as preferable to those made of the reddish or yellowish clays, that are most commonly found in the higher parts of the district; this, however, I believe depends on its containing small silicious pebbles; where it contains none of these, the black clay makes very brittle ware.

It is not to be imagined that these divisions are exactly defined by certain lines, which separate totally the productions most peculiar to each from those belonging to another division; such exactitude is never observed in the works of nature; but in the mineral productions of each division there is a great predominance of certain minerals, although detached portions of the minerals of another division are occasionally interspersed.

#### SECTION 1ST.

##### *Of the*

##### *Minerals of the Rajmahal cluster of hills.*

This is the only part in India where I have seen a great mass of stony matter disposed in what are called horizontal strata; nor is it everywhere in these hills that this position can be traced, and it is chiefly observable on their higher parts. There it may be in general traced, wherever any considerable excavations have been made, or wherever there are abrupt precipices. Such however are not common; for although the hills are steep, they are not broken by great rocks; and the stones by which their surface is covered, are generally small detached masses. Towards the roots of the hills, again in many places the rocks are absolutely devoid of visible stratification.

The great mass of these hills consists of what appears to me to be the variety of Trap, called Whinstone in Turton's translation of the *Systema Naturæ* (vol. 7, p. 127), although I am not clear, that it is not a compact lava, (vol. 7, p. 128), between which stones I know of no proper limit. It is found in detached masses on the bank of the river at Rajmahal and Sakari-gali; but both there, and in most other places, no appearance of stratification can be observed. Its horizontal disposition may however be very clearly discerned at the iron mine near Partappur, in the division of Fayezullahgunj, where it forms the horizontal floor and roof, between which the ore is contained.

Very nearly allied to the above is what is called Hornblende in mass, which differs chiefly in being much

softer, although it still retains a great degree of toughness, and resists the action of the air much longer. It takes a tolerable polish, although inferior to that of marble, with which however it is often confounded. On account of the ease with which it is wrought, and of its durability, this stone is in great request among the natives. At Paingti it is found in rounded masses immersed in a soft substance, evidently consisting of the less durable parts of a rock of the same nature, now gone to decay. In some places this rotten mass has lost all traces of its origin, and has become a deep red soil, in which masses of the Hornblende are found imbedded. Masses of several feet in diameter and quite sound might be procured; but the natives content themselves with smaller ones, that they cut into the stones on which they grind the materials for making curry, and many other substances. This stone, some say, should be called Tiliyat; but others allege that its proper name is Songkhara. On the hill named Taruya, near Paingti, has been a quarry of this stone, from which great quantities have been taken, it is said during the Mogul Government. The place is conveniently situated, and very fine masses might be procured for building, no part of the rock having as yet decayed.

The two stones hitherto described, Whin and Hornblende, were by Wallerius classed together and called Hornstone (*Lapis cornues*), and both the arrangement and nomenclature seem excellent, as both stones possess great toughness without being very hard, and as their colour resembles that of a black horn. Modern mineralogists, however, in the progress of their science, which seems both in arrangement and description to be retrograde, have applied the name hornstone to other minerals, which have little or no resemblance to horn, and which are flint in the mass or rock. At Sakarigali, close by the edge of the water in winter, is a curious horizontal layer of this stone not above a foot wide, but exceedingly difficult to break. It is filled with the exuviae of a fern. It is divided by fissures into rhomboidal masses, from 6 to 12 inches in diameter.

A substance, which naturalists include among the clays, but called Khari by the natives, is very generally

diffused through these hills, and several quarries of it have been, and still are wrought. When perfect, it is a substance somewhat like chalk, but is not calcareous. Women in many parts eat it, when breeding, as in Bengal they eat baked clay, and some of it for this purpose is exported to Murshedabad. Boys, when taught to write, rub it with water into a white liquid, with which they form letters on a blackboard. Finally, native painters and gilders cover with this liquid the wooden work on which they are about to operate. The best Khari is white, and although little harder than chalk, seems to be formed of siliceous stones in a state of change. Among these hills I have found no specimens of the flinty hornstone, yet I think it probable, that formerly much has existed, for everywhere there abounds a kind of imperfect Khari, which to sight has every external appearance of the real kind, but is vastly too hard for use, and in fact is in an intermediate state between the proper Khari and flinty hornstone. Farther in a piece of this imperfect Khari, which I found on the road between Sripur and Majhuya, are evident traces of vegetable impressions, which serves to connect its origin with that of the hornstone of Sakarigali above mentioned. Still farther, in some pieces of imperfect Khari, I can trace the gradations from that stone to a kind of granular quartzose concrete, very common in these hills. Although the best Khari is white, yet much of a proper softness, as well as of the hard and improper kind, consists of various parallel layers of different colours, sometimes plane, at others very curiously waved. The colours are white, red and dirty yellow. I shall now mention the quarries of the proper Khari that I saw, and some of which I only heard.

On a hill called Kharipahar, the farthest south on the range, which I am now describing is by far the best quarry. It is covered by a horizontal stratum of stone about three feet thick, under which it extends to an unknown depth; but in their operations the people have not exceeded six or seven feet. It is disposed in vertical plates from one to three inches thick, and separated by an ochraceous matter, among which I observed traces of mosses. The plates run North and South,

and are of various shades of white, but the whitest and softest alone are selected for market, and freed from the ferruginous matter. This Khari seems to be what naturalists call a porcelain clay, and of a very fine quality, and perhaps as ballast might be sent with advantage to Europe. This quarry has been long wrought; and although situated on a hill belonging to the southern tribe of Mountaineers, and cultivated by them, has been considered as the property of the Virbhumi Rajas, and on the sale of their estate went, as a separate lot, to Lala Gaurhari, who pays for it 29 rupees a year. He sometimes has wrought it on his own account, and sometimes has let it to a manager. Whoever works it, gives to the hill people, who quarry,  $2\frac{1}{2}$  Sers of rice for each ox-load of 3 mans, and this he sells at Murshedabad for about  $1\frac{1}{2}$  R. He annually digs about 1000 mans ( $58\frac{1}{6}$  S. W. a ser), each weighing rather more than 60 pounds.

About three miles farther North, on a hill called Porgang, is another quarry of Khari, which I did not see. When I was in the vicinity, in Dec. 1810, it had been only lately discovered, and wrought for about six months, during which 500 mans had been procured.

At Mansa-Chandi, a small hill near Phutkipur, was a mine of Khari, which had been dug from a kind of sloping gallery running through a curious argillaceous stone, that will be afterwards mentioned; but the deity of the hill, about 40 years ago, was supposed to have taken offence at the people prying into her secrets and the work was stopped.

On the hill called Gadai Tunggi at no great distance from the above, and belonging to the Northern tribe of Mountaineers, is a fine quarry, now wrought. The hill forms the N.E. corner of the range overlooking Rajmahal, and consists mostly of whin, but the surface in some places is covered with slaggy fragments, that appears to me to have undergone the action of fire. The Khari is only covered by red earth from 18 to 24 feet thick. Through this earth the workmen dig a sloping passage, open above, and perhaps four feet wide, until they reach the Khari, when they dig a gallery into this substance, and take out as much as is wanted. Every year

this must be repeated ; as in the rainy season the water fills up the passage, and brings down the roof. A merchant hires the hill people to work, and, on account of the risk, gives them four anas a day. The Khari here is softer, and more unctuous than at Kharipahar, and being mostly in layers of different colours, is chiefly used as a medicine. In fact it is what naturalists call Bole, or perhaps Lemnian clay ; for in water it does not fall to powder. On one piece I saw somewhat like the appearance of a bivalve shell; but, if such, it was so much decayed, as to render its nature uncertain.

✓ The last quarry, that I shall mention is on the hill called Modiram, which is a little south from Kahalgang, and forms the North-western extremity of the range, which I am now describing. This quarry is a procelain clay, being of a less unctuous quality than the last ; but on being put into water, it falls instantly to powder. It is not however so pure as that of Kharipahar, being less white ; but its colour is an uniform pale ash, nor is it intermixed with ferruginous matter between the layers ; and being close to the river, its price at Calcutta might be a trifle. It has been wrought in two places, pretty high up the hill. The stratum in each has been from three to four feet thick, perfectly horizontal, and extending into the hill for an unknown length. The roof and floor in both are imperfect harsh Khari. The natives dug into the lower quarry, without leaving pillars, to support the roof until that fell. About three years ago, they went to the upper quarry, now wrought, and have made a large excavation, perhaps 20 feet each way, and they will continue to enlarge it, until the roof falls, when they will look for some other place. The leaving pillars to support the roof, is a mystery far beyond their present attainments in the art of mining ; and when mentioned, was received with numerous frivolous objections.

Very nearly allied to the above Khari, and frequently indeed forming alternate layers in the same mass, of the more imperfect kinds, is the stony substance called by the natives Geru, which differs only from Reddle in being harder. It has not been found in large masses, and is in general so much intermixed with matters of

another colour, to which it firmly adheres, that it is never sought after in quarries. Small fragments that are found scattered in the beds of torrents, and which, in the progress of decay have been separated from the other matters, with which they were united, are sometimes collected near Kharipahar, and used as a paint, for which they seem well fitted.

I have already said, that some of these Kharis probably owe their origin to sand-stones, and of these there are in this district a great many. Some are horizontal, and of these some seem to be composed of the debris of siliceous rocks united together, partly without any visible intermediate cement, as on the ascent to Kharipahar, and partly by a cementing matter, in which little masses of quartz are thickly interspersed, as the stratum which covers the quarry of Khari on the same hill: others again seem to be the mere sand of the river united by some unknown process of nature, as at low water mark under the hill at Paingtii. In other sand-stones however there is no appearance of stratification, horizontal or vertical; and such seem to me to be granitic rocks in a state of decay. The various stages may be traced at Patharghat, under the temple of Bateswar, and the most complete specimen may be observed on the Pirpahar, which is a few miles above Rajmahal.

Sand-stones in many parts of the world form the best material for building; but in this district, so far as can be judged, from what appears on the surface, they are of little or no use. The only one, that seems to have been wrought, is on the face of the hill above Patharghat, where the edge of a horizontal stratum of concrete siliceous stone has been smoothed, and carved with numerous figures, probably of considerable antiquity. The stone is certainly very ill-fitted for sculpture; but seems to resist the weather, and probably would answer well in building. A stone of a similar nature, but much more perfect, is found on the summit of Kangreswarikatok, which I take to be the crater of an extinguished volcano; but its situation is too distant from water carriage to admit of its being used.

Besides the granites and vertical strata in a state of decay, I must mention, that under the northern and

southern extremities of this range, at Patharghat and Kharipahar, there is a large grained grey granite with black micaceous or shorlaceous spots. At Patharghat the rock is washed by the Ganges, and fine masses might no doubt be procured. In the very southern extremity of the division, on the Duyarka river, is a fine rock of solid granitel consisting of black shorl with many small specks of white quartz. It may be doubted however, whether any of these primitive rocks form a part of this eastern range, as they are found just on its extremities, and may belong to adjacent mineral structures.

I here observed several breccies, with an argillaceous cement, containing rounded nodules of different kinds. One of these was in the bottom of the cavity in Kangreswarikatok, a place, which I take to have been the crater of a volcano. Another was on the hills between Putkipur and Mansa Chandi, which consists chiefly of what appears evidently to me to be a slaggy matter, that has undergone the action of fire; but, before I proceed to treat further on such slags, I must observe, that South from Mansa Chandi, at Jaipur on the borders of Virbhumi and Murschedabad, there is a hill, which consists chiefly of a clay readily cut with a knife; but which on exposure to air becomes somewhat hard, and is evidently of the same nature with the brick-stone of Malabar, which I have described in my account of Mysore. It is however vastly inferior in quality. This clay has a very strong resemblance to the slaggy stone of Mansa Chandi, and some parts of it, that have hardened into stone, are scarcely distinguishable, except by wanting the slaggy appearance. They must however be considered as a kind of breccia, as they contain ferruginous nodules in an argillaceous cement.

To return to the slaggy matter, which I consider as having undergone the action of volcanic fire; I cannot say that I saw it anywhere, very decidedly, forming great masses like currents of lava; but on a great many places, I found it in detached blocks lying on the surface, such as on Pirpahar near Rajmahal, on Chaundipahar, on the road between Sripur and Majhurya, and on different parts of Kangreswarikatok, which I consider

as the old crater. On Mansa Chandi and Gadai Tunggi, I am inclined to think, that the masses were united into solid rocks; but, without digging, that could not be ascertained. On the edge of what I took to be the crater of Kangreswarikatok, I found a stone which appeared to me to be volcanic sand conglutinated; and resemblance between this stone, and the siliceous concrete, that is often incumbent on the Khari, is very strong. This, together with the circumstance of the vein of Khari contained in the slag of Mansa Chandi, seem to imply an extension of the operations of fire over the whole of this mineral division of the district.

I have said, that Kangreswarikatok, on the western extremity of this range towards Parsanda, appears to me to have been the crater of a volcano. It is a conical hill about 300 feet in perpendicular height, and very steep on all sides. On reaching the summit you find that it consists of a great cavity surrounded by a thin ledge, and descending to very near the level of the plain. The ledge now is of unequal heights, having in some places given way, especially towards the east, where a gap, about 30 yards wide at the bottom, gives access from the outer plain with very little ascent, and allows the water from the cavity to escape. Towards the summit the inner surface of the ledge consists of abrupt rocks, but the bottom is filled with the debris of the portions of the ledge, that have fallen. Much slaggy matter is to be found both on the outside of the hill, and in the bottom of the cavity. I have not observed any other place that appeared to me to have any resemblance to a crater, but many such may exist, as I could examine only a very inconsiderable number of the hills, and as it was by the mere chance of having been detained by a rainy day and being idle, that I visited Kangreswari-katok.

I was informed by Isfundiya Khan, a fine young man, assistant to the Suzawul, who manages the hill tribes, that about five years ago he heard of a smoke, that issued from a hill named Chapar-Bheta, about 7 coses S.E. from Karariya. He visited the place, which was not hollow, and consisted, as usual, of earth mixed with a great many fragments of stone. In the day it

was not luminous; but a thin smoke issued continually from a space about 8 or 10 cubits in diameter. He heard, that in the night it was luminous, but he did not see it in that state. On throwing wood upon the hot place, in a few minutes it took fire. These appearances continued for about three years, and then stopped. When I heard this account, I had long passed Karariya; otherwise I should have certainly attempted to visit the spot, although the distance was represented as 12 or 14 miles, and the road impracticable for any sort of conveyance.

In this range of hills I saw no trace of pyrites, coal, nor other inflammable substance. I have however been informed, that at Motijharna, on the hills near Sakarigali, there is a stratum of coal; but this information I also received long after I had been in the vicinity, and from a person, on the accuracy of whose accounts, I had several opportunities of knowing, that no reliance could be placed.

Besides the slaggy detached masses, that are scattered over the surface of this mineral range, there are two other classes of sporadic bodies, that are very common, not on the higher hills, so far as I saw, but at their roots, or on very low hills, or very often on the plains, that are interposed.

The first of these sporadic masses, that I shall mention, are siliceous, and are usually found scattered over surfaces, intermingled with fragments of whin, slag and imperfect Khari, and I suspect owe their origin to these bodies under a fusing heat. I found them at the bottom of Gadai Tunggi, and Chaundi, near the iron mine of Partappur, but above all on the road from Sripur to Majhuya, for almost the whole of its extent, which is about 14 miles, just in the centre of the northern part of this mineral range. Many transitions, or intermediate states, between the three substances, to which I have above alluded, and the more perfect siliceous nodules may, I think, be observed. When perfect, they are more or less diaphanous, or even transparent, and many of them are crystallized. Some of their substances are uniform, others are in various coloured layers, but in general without the smallest interruption of

continuity. These layers are sometimes parallel, sometimes concentric, and several nodules with concentric layers are often included in one mass. Many of the masses are covered with stellated pits, as if they had formerly been corals; but the crystallized internal structure of some, that are thus pitted on the surface, seems to prove that the appearance is not owing to the impression of animal exuviae. The crystals are very various. In general they are clusters covering the surface; but in others they are confined between parallel plates; while in others they shoot from the inner surface of a smooth cylinder, and fill its cavity; finally in others they form through the substance of the nodule very curious angular cavities.

The other kind of sporadic masses, scattered on the surface of this mineral tract, is calcareous, and consists of nodules called Ghangat. In some places these nodules are small, lie on the surface, so as to cover it entirely, and prevent vegetation. In others they are inbedded at some depth in a thick red soil, through which they are scattered at various depths. Their surface is white, and very irregular, and their shape is very various often branching out like corals. They are exceedingly hard, and within of a compact structure, and are entirely similar to the calcareous nodules found in the South of India, which I have described in my account of Mysore. In the interior of the district they are generally found on the surface; but towards the banks of the Ganges are most usually immersed in the earth, and in both are used for making lime; but it is of an inferior quality, and is not white nor fit for the outside plaster, with which walls are encrusted; but answers well enough for mortar to connect the bricks. On the hills of Paingti and Sakarigali considerable quantities are burned.

This calcareous matter seems to me to be a kind of tufa, and to have been once in a soft state. On these detached nodules indeed no impressions can be traced, and there is strong reason to think that they are now forming, as it is alleged by the workmen, that the same earth from which they have been taken, after a lapse of some years, is found to contain new ones. But farther the very same calcareous substance, of which these

nodules consists, is found in very large solid masses, in which it seems to have flowed over the surface of the stony matter, and to have involved many detached portions, or to have lodged on the surface of a rock, into the crevices and pores of which it has penetrated, so that the two masses cohere. The external surface of such masses is as unequal as of that of the nodules, and resembles that of some corals.

At Paingti two very distinct kinds of this tufa in mass may be traced. One exactly resembles the stone of Manihari described in my account of Puraniya, and which, when I wrote that, I considered as a porphyry changed into calcareous matter; and in fact it so exactly resembles the argillaceous breccia found in the hills south-west from Phutkipur, that I have very little doubt of its having been once of a similar nature. In this are involved many masses of the hornblende in mass, which I have mentioned as constituting the greater part of the hills near Paingti. The masses of hornblende are of very various sizes, from that of an apple to that of the head, and have been rounded by the progress of decay, before involved in the calcareous mass. The other kind of solid calcareous mass found at Paingti consists of the common tufa, involving pebbles of various natures, but mostly of the Geru, or indurated reddle, that I have formerly mentioned.

At Patharghat, again, the same calcareous substance has flowed over a stratum of the red concrete sandy matter mentioned as found there, and entering its crevices, has united with it into one mass.

This calcareous matter at Paingti has also formed a very different substance from the above-mentioned tufa, or at least has in decay suffered a great change of appearance, forming a friable granular substance; but it retains traces to show that it has formerly resembled that which I suppose to have been changed from the argillaceous breccia. This is a very considerable mass, into which the cave under the old Mudursah, described in the topography, has been dug.

In this portion of the district the quantity of metallic matter in the form of ore is not very considerable, and it is iron alone that has been discovered. The

richest mines of Virbhumi are close adjacent to its S. E. side, and probably are connected with it in mineral affinity, for mines were formerly wrought at Virkati in Sultangunj (? Sultanabad), and at Kalidaspur in Ambar, both on the eastern side of this division; but these have been abandoned, and are now entirely choked, so as to be inaccessible. The former were situated in a stratum strongly resembling the indurated clay of Jaypur above-mentioned; and at Jaypur I found plates of iron ore, forming a mass contiguous to that clay, and separated from each other by argillaceous matter strongly impregnated with iron. They are not attracted by the magnet, have a somewhat conchoidal fracture, very fine compact grain, no lustre, a very dark reddish brown colour, and red streak.

The finest iron mine, however, in the district is on the hill named Ramkol, a little south from Pantappur, which I have already had frequently occasion to mention; but this also has been abandoned, the people in that vicinity having been totally abandoned to sloth. The mine is a horizontal stratum, some way up the hill, running to an unknown extent between two solid masses of whin or trap, which compose the hill. The stratum of ore was said to have been about seven feet perpendicular thickness; but, having been wrought exactly in the same manner as the quarry of Khari on Modiram, the roof has fallen, and the exact dimensions cannot be ascertained. The whin immediately adjacent to the ore is decayed, or as the natives not unaptly say, is dead, which rendered the precaution of pillars still more necessary. The ore is of two natures. In the upper part of the stratum it is softest as in a state of decay, is called Laliya, and is attracted by the magnet. In the under-part it is harder, is called Kariya, and is not attracted. This is said to be the best ore, although it would appear to be specifically lighter, and should therefore contain least metal. Both are black with a common lustre, and contain small grain and dots, which to me give an appearance of its having undergone fusion. This is probably the only mine in the district which European would consider worth working.

In this part of this district, as well as in the third of its mineral divisions, there is a very common appearance,

which I think may possibly arise from ferruginous vapours issuing from the earth. In certain places all the fragments of stone and pebbles, that are lying on the surface of the earth, are covered with a kind of brownish enamel, quite thin and superficial. The stones thus covered are all of different kinds, nor does any one in the same space seem to escape, while similar stones at a little distance, are in no manner affected.

In September 1810, at Masdharipahar, about 10 coses East (? West) from Kalikapur, in the territory of the ern tribe of mountaineers, a considerable space of the surface of the hill, said to have been about 40 yards each way sunk downwards, leaving a cavity 10 or 12 cubits deep. The cavity at first was filled with water, but soon dried. The soil was a red clay mixed with many fragments of stone. The intermediate country was so inaccessible, that I could not find means to visit this curiosity.

#### SECTION 2ND.

*Of the*

#### *Minerals of the western range of hills.*

In the former division I have said that the most predominant rock is of the nature of whin or trap, and quartz is there rather an uncommon ingredient, at least in masses of a great size; but here a large proportion is quartz, and a still greater a kind of rude jasper, or petrosilex, called hornstone by later mineralogists; and these two siliceous stones run so into one another by various gradations, that it is difficult, if not impossible, to say where the one begins, and the other ends.

It is, I imagine, difficult to say, that these hills are in any degree stratified, although they sometimes assume an appearance of that form. In general the siliceous rocks are intersected by a vast number of fissures horizontal and vertical, cutting them into masses approaching to the form of cubes and parallelopipeds; and, when they are exposed to the weather in a state of decay, these masses divide into layers somewhat like those of wood, especially if the mass is exposed on an abrupt vertical surface; but if the surface exposed is

horizontal, and level with the earth, the layers more resemble slate. In some places the vertical fissures, extending the whole depth of a perpendicular rock, give somewhat the appearance of basaltic columns, which may be especially observed in the magnificent recess called Marak, about 15 or 16 miles southerly from Munger; but in fact, so far as I observed, there is nothing really columnar in the district. These hills are particularly distinguished from those of Rajmahal by their rugged nature, vast masses of naked rock projecting everywhere on the surface, and forming precipices of great height and abruptness.

The form which the greater part of this siliceous stone assumes, is that which I have called rude jasper, or petrosilex, the hornstone of modern writers, for although these stones are considered as different, yet in the specific characters which are given, there is, as often happens, no real difference. If we take the character of Wallerius, that petrosilex is found only in veins, or detached masses immersed in rocks, and that jasper forms whole rocks, then undoubtedly our rock is a jasper; but it in general departs very far from the appearance of what is usually called such. It is a rock striking fire copiously with steel, with a large conchoidal fracture, forming when broken sharp edges like a flint, and its fracture has a rough, earthy appearance, being composed of very fine grains. In most parts it is of different shades of white or ash colour; but in others it inclines to livid, and still more often to red, but it is seldom that the redness extends over a whole rock; it is generally confined to layers alternating with others that are parallel and white, or it is confined to spots or flakes on a white ground. Such more resemble the stones commonly called jasper; but whether it could be wrought, or take a polish, I cannot say, having been unable to procure a workman.

This jasper or hornstone sometimes has larger grains, so that each is very distinguishable to the naked eye, and then it approaches near some of the quartz, which becomes granular; but there are other stones, which are a kind of intermediate between the two species, where a mealy or arid quartz approaches

very near to our jasper, and there are still others which would seem to be composed of small portions of the two stones huddled together, and firmly united to form, what naturalists call an aggregate, as will be afterwards mentioned.

The quartz, in its most perfect form, consists of a substance approaching to glass, the conchoidal appearances on which, when broken, are very minute, and are known to differ from the former by every one who has taken the pains to compare the appearance of a piece of broken glass with that of a flint. The quartz, of which also there are many rocks, is sometimes almost pellucid like glass, sometimes white, sometimes red, or stained with red just like the jasper, and sometimes livid. Most of it has a fat unctuous appearance; but some of it approaching to the jasper, has dry earthy-looking particles; but, when broken, wants the large convexities, that distinguish that stone. Again, other portions consist of small grains, united together, and some of these have the fat appearance, while others in the same stones are mealy, and thus form what the mineralogists call an aggregate.

The quartz again is very often mixed with extraneous matter, and especially with what is called mica, which shines like gold or silver. When this is in very small quantities, thinly scattered through the body of the quartz, the rock may be considered as simple; and among the whole quartz of this division very few masses of any size could be found, in which a few specks of mica might not be shown; but, when the stone consists of some practices of quartz and others of mica heaped together, and closely united, these particles form what is called an aggregate, and I shall proceed to treat of these, after mentioning, that mere quartz is so full of fissures that it does not cut for building. The fort of Gidhaur is indeed, in a great measure, built of it, or of the rude jasper from the adjacent hill; but the masses have not been squared by the mason; the parallelopipeds, as rudely formed by nature, have been employed.

To return to the aggregate stones, both what I have called granular quartz, and granular jasper petrosilex

or hornstone, may be considered as an aggregate; although it is usual to confine that term to rocks, in which more than one kind of matter has been aggregated.

When the stone is compounded of glassy quartz, intermixed with mealy quartz or hornstone, which in such cases I do not know how to distinguish, the term will be more readily admitted. In this part of the district there are many such rocks, and they are sometimes coloured in the same manner as the jasper. In some cases the mass consists of thin alternate layers of this aggregate, and of simple fat quartz, as on the detached hill called Khejuri, a little south from Tarapur.

I have already mentioned, that large masses of quartz, which do not contain any mica, are seldom found; but when the mica and quartz are, as it were, intimately combined in minute parts placed parallel to each other, they form a stone which has been called schistose mica, and on the hill Rauta, a part of the transverse chain reaching to Jathaurnath, may be found stones in all the intermediate stages from pure granular quartz to the perfect schistose mica. A little east from Rauta, near a hill called Barai, this last substance is found in a considerable mass, forming a small hill called Barapahar, and is wrought for making the stones of hand-mills. It is by the natives called the Dudi stone, and is divided into irregular trapizoidal flags, separated from each other, first by vertical fissures, which run east and west, at from two to four feet from each other; secondly, by other vertical fissures which cross the former at right angles, generally at greater distances; and finally by horizontal fissures, at the distance of from six inches to one foot; but these flags are so much shattered by subordinate fissures, that solid masses, fit even for making the stone of a handmill, cannot be every where procured. This stone cuts readily with a chisel, and does not readily tarnish in the air. It has a pale greenish hue from the mica, perhaps approaching somewhat to the nature of chlorite. In some places it is stained red. The same kind of stone is found at Tahuyar Nagar Ghat, in the same vicinity but it is not wrought.

Where the aggregate consists of two distinct matters mixed together without any apparent order, it is usually called a granitel, and some such are found on the hill Rauta abovementioned, especially one seemingly composed of quartz and chlorite; one composed of black very heavy shorl, or perhaps micaceous iron ore, with some spots of quartz; and finally one composed of white quartz, with a smaller proportion of the same black matter. These latter aggregates may be perhaps considered as adventitious in this division of the minerals, as they are on the boundary of a territory abounding in such, and quite different from the general mass of which I am now treating.

The only one which I consider as properly belonging to this mineral range, is a stone composing the small hill called the Kamuya (working place) of Laheta, 15 or 16 miles southerly from Mungger. It has been long wrought for the stones of handmills. The quarry is on the southern declivity of the hill, runs nearly East and West, and has been opened in different places for a considerable extent. The excavations are now pretty large. One of them, the largest that I saw, might be 200 feet long, 20 wide, and 12 deep; but so irregularly and unskilfully wrought, and so clogged with rubbish, that the proper extent of good stone is not readily determinable; and this good stone is bounded on each side by kinds which, in the eye of the mineralogist, scarcely differ; but which the workmen reject as too hard and difficult to work. The workmen take a piece suitable for their purpose, wherever they can find it most easily, cut it into shape on the spot, and then look for another, until the whole quarry is so filled with rubbish that no more mill-stones are procurable. Pioneers are then employed to clear the quarry. This is also choked with large masses, which the workmen avoid as much as possible, as being troublesome to break. Fine stones for building might therefore be readily procured, and it seems to be an excellent material which cuts readily with a chisel. It is an uniform aggregate, without a tendency to schistose structure, and consists of grains of glassy quartz, united by a greenish grey substance, which has no lustre, and might be perhaps considered as of the nature

of powdery quartz or hornstone; but its colour is against that supposition, and in many places, I think, I can trace the foliated appearance of mica. It contains some small red spots, which seem to me to have arisen from the iron of the mica when it decayed, having collected in the form of ochre. If wanted for building, the part of the stone above the quarry, which is rejected by the workmen, as wanting fissures to facilitate its division, and by them called Korra, would be found the best, but its distance from the river is perhaps too great.

The siliceous matter of this division of minerals also has some tendency to form the kinds of clay called Khari, of which there is a very considerable quarry on a hill south-west from the hot springs of Rishi Kunda, but which I could not visit. It is of an uniform bluish grey colour, but becomes white when powdered. It has a soft greasy feel, does not readily fall into powder when put into water, nor does it adhere to the tongue. It is chiefly used for writing and painting. From the unctuous nature of its feel, this might be suspected to belong to a class of minerals, that will be soon mentioned; but I think, that on the banks of the Man, near the hot springs of Bhimbandh, I found the petrosilex in a state of decay, advancing towards the formation of such a substance; and at Amjhor Ghat, nine or ten miles from Munger, I saw a red grained siliceous aggregate, evidently in part changed into a kind of Khari, called there Parori Mati, which is used by pregnant women as a medicine.

But farther, a Khari used in writing, is found on a hill called Geruya. It is a stratum of an unctuous substance, which cuts smooth with the knife; and although on the face of an arid hill, retains some moisture, even in March. When dried, it adheres to the tongue, and instantly, on being put into water, falls to powder. It is of a fine white colour, veined and spotted like the siliceous rocks, between which it is found. These rocks have a strong resemblance to the argillaceous breccia, mentioned in my account of the first division of minerals, as being found near Phutkipur; but its cement is most evidently siliceous, and it contains veins and nodules of quartz, as well as nodules of other substances.

The whole has more or less of a slaggy appearances, and some of it has, in my opinion, most clearly undergone the action of fire. There is, however, nothing about the hill that resembles a crater, and it is quite sporadic, in the midst of the third mineral division, near Jamdaha, on the left bank of the Chandan. I am however induced to consider it as a detached portion of the second class of minerals, from its resemblance to the hill named Katauna.

This hill Katauna is situated a little south from Thanah Mallepur, in the centre of this mineral division, although it belongs to a detached portion of the judicial district of Ramgar, which is surrounded by Bhagalpur. There is no Khari on Katauna, nor has it, so far as I saw, any appearance of a crater; but its stone is exactly of the same nature with that on Geruya. Notwithstanding the copious warm springs which it contains, these are the only traces of volcanic fire that I have observed in this mineral division.

The soft matter called Khari, formed of the siliceous rocks hitherto mentioned, leads me to speak of a softer class of stones, which occupies much of this mineral division, although by no means so much as in the first described portion of the district; nor did I here observe any whin; they are all of a softer nature, although many of them are abundantly tough, and difficult to break with a hammer. Commencing a little south from Munger, and going south almost to the parallel of Kharakpur, and then turning west to the banks of the Kiul river, is a long uninterrupted hill. On both sides it is siliceous and in one place where I crossed it, the siliceous matter is no where interrupted; but in every other place which I had occasion to observe, the centre of the hill seems to consist of a much softer material.

One of the best of these stones, is a very fine grained hornblende in mass, containing small crystals of the same matter, and of a greyish black colour. There is a good quarry of it near Masumgunj, where a few workmen have been long employed in cutting blocks, from whence images of Siva are finished at Munger, and sent all over Bengal.

Very nearly allied to the above at Amjhor ghat, a very little south from the above-mentioned quarry, I saw large rocks of a fine silky lustre, and consisting of parallel thin layers of different shades of grey, but having nothing schistose in their texture. I found detached blocks of the same at Amarkol, south-west some 10 or 12 miles.

At the same place I found detached masses of a stone, which differs only from the former in its layers being of different shades of red and white. I nowhere saw the solid rock of this stone; but it is probable, that there is such in some place of easy access; as two of the gates at Munger, have been in a great measure faced with it, and have been ornamented with many foliages cut in relievo. It does not take a finer polish than the hornblende, and does not resist the action of the air nearly so well; but from its colours it is more beautiful, and fit for buildings. In this stone had been imbedded many small cubical masses, but they were in such a state of decay, that I can form no conjecture concerning their nature.

By far the greater part of the stones of this class, that I saw, were, however, schistose or slaty, but none of them, at least by the native artists, that I tried, could be split sufficiently thin for roofing slates. Some of them are, perhaps, argillites, but the greater part is of schistose hornblende. The one that is in the thinnest plates, least silky, and freest from crystallisations, and that therefore is the nearest an argillaceous slate, has somewhat of a bluish hue, but in general they are black, or intensely dark grey, with a silky lustre, and sometimes of a fibrous as well as of a slaty texture; and most of them contain small plates, I presume, of hornblende. They take an imperfect polish; and, when rubbed by a pencil of the same substance, leave a grey streak, so that they might serve for keeping accompts. In many parts they are wrought by the natives, who form platters of them; or make slabs, with which they lay floors. In general the workmen content themselves with taking fragments, that have been separated from the rocks by the streams of mountain torrents, but in some places they have taken the pains to procure a smooth surface, and split masses

from it, as required. In some places adjacent to these proper strata of slate, I observed schistose matter in decay, which appeared to me as a kind of transition between the slate and the adjacent siliceous rocks ; for it was more harsh than the proper slate, and in some places showed a tendency to the conchoidal fracture. In some places these slates contain pyrites, but not in great quantity.

Very nearly allied to these schistose rocks are others of a similar colour, and silky lustre ; but their structure is not at all slaty, and consists of a number of parallel fibres, strongly conglutinated. These are what I presume some naturalists call unirpe asbestos. In some places it is disposed in thin parallel layers alternating with white quartz. It is not applied to use.

At Haha, on the Man river, I observed a bed of a black talcose matter, with a silky lustre ; and, except where the river had laid it bare, enclosed on every side by siliceous rock.

Mica, which serves as a substitute for glass, in its shining appearance is nearly allied to the above ; and, as I have mentioned, is very generally diffused through the masses of quartz. In some places I found it abundantly transparent ; but the plates were too small for use. Near Ghoramara, however, I learned that there was a place called Abarak, the name which the natives give to this substance ; and in passing it, some of my followers found pieces tolerably large, which, with the addition of the name, induces me to think that the substance is procured from thence, although this was denied by the natives.

The only stones of this portion of the district that remain to be mentioned, are the calcareous.

The detached calcareous nodules called Ghanggat, and mentioned in the former division of minerals, are in this also very common, and need not be again described.

The calcareous matter in mass is of two kinds, both very different from that of the first division.

One called Leruya, is on the border of the Ramgar district, in the channel of the Ulayi river, and is said to be a small rock ; but I did not see the place, nor can I judge of the extent of calcareous matter. It is a white

marble, with small crystallisations confusedly heaped together, and intermixed with a little yellowish green mica, so that it must be considered as an aggregate. It takes a polish; but whether large blocks could be procured I do not know.

The other calcareous matter in mass is called Asurhar, or Giant's bones. The greatest quantity is found at a place, in the centre of the hills, called Asurni, or the female giant. As the lime, produced from this substance, is whiter and better than that made from the nodules, a great part has been removed. It occupied a space on the surface of the declivity of a hill, about 40 or 50 yards in length; and from the bottom of the hill extended upwards from 10 to 40 yards, and seems to have formed a crust from 2 to 3 feet thick, covered by a thin soil filled with loose masses of stone. It has evidently been fluid, or, at least, gradually deposited from water, as it has involved many fragments of stone, some earthy matter, and a few univalve shells, of a species with which I am not acquainted, and cannot therefore say whether they are a marine or land production.\* The masses of stone that have been involved, vary from the size of the head to that of a walnut, and the Asurhar, or calcareous tufa, does not adhere very firmly to them, so that in breaking, the mass being very hard, these nodules are generally shaken out. Near the quarry I saw no rock; but all the fragments involved, and those under the calcareous matter are of a dark-coloured siliceous matter. In this place I saw appearances that in some measure justify the native name, for one piece of the Asurhar contained what had very much the appearance of a flat bone, with a process projecting at one end. I also observed a curious impression, a semicylinder about 3 inches in diameter, and 18 inches long, not quite straight, and exposed to view, as if, by breaking the rock; the other half of the cylinder had been removed. The surface of the cavity was wrinkled with transverse folds, like the inside of an intestine; but may have possibly been the bark of a tree, although I have seen no bark with such wrinkles. I rather suppose, that this has been impression of some marine animal. The greater part of this Asurhar, as I

\* I have since found these shells in the rivers of Gya Vol. II.

have said, has been burned by Mr. Christian, a Polish merchant of Mungger, who, I am told, owing to the expense of carriage, did not find it advantageous. His overseer gave me a piece of it crystalized, which differs in some respect from any calcareous spar that I have seen. I myself found no crystalized matter in any of the Asurhar. This substance is also found close adjoining to the hot sources of the Angjana river, and by the natives has been wrought to a trifling extent. It is in a stratum about a foot thick, lying on loose siliceous stones, to which it adheres, and is covered by about a foot of soil, mixed with stones. So far as I saw, it contains no animal exuviae. On the stones, through which the hot water issues, both at the sources of the Angjana and at Bhimbandh, there adheres a tophaceous matter, so like this Asurhar, that I at first sight concluded it to be the same ; but on trial I found that is does not effervesce with the nitric or muriatic acids, and is probably of a siliceous nature.

I have already mentioned the pyrites found in the slate, and they seem to be martial, but the quantity is very small. Among this class of minerals, the only iron mines of which I heard are in the ridge which extends east to Jathaurnath ; and as they are on the borders of the third division, which abounds in similar mines, I suspect that they in fact belong to this division, and one description may serve for both.

### SECTION 3RD.

#### *Of the*

#### *Minerals of the southern central division of the district.*

This division, as I have said, contains in its centre one detached hill, Geruya, of a nature which seems to belong to the class last described ; but as the great predominant features of that division were hornstone, or quartz, and stones approaching to hornblende in their nature, so in the division which I am now about to describe, the grand predominant feature consists of aggregate rocks, composed of felspar, or shorl, intermixed with quartz, and sometimes with mica ; nor in the whole, did I see one rock of hornblende, either in mass or schistose, nor any one even approaching to these in

nature. This division also abounds in iron mines, and what I have called shorl may, I suspect, in many cases, be rather what is called black micaceous ore, and its separation from the other ingredients of the compound rocks may give rise to the iron mines.

Although these aggregates, containing felspar or shorlaceous matter, are the great component parts of the division, quartz is also very common, not only forming parts of the aggregate, but also forming alternate parallel layers in the same rock, and even whole strata. I nowhere observed anything like hornstone, or rude jasper, except on the hills, by which the whole civil district is skirted towards Virbhumi. I crossed these only in one place, between Dumka and Chandrapur, and therefore cannot speak with precision on the subject. There, however, although the greater part of the rocks were granitic, I found a granular reddish hornstone, exactly resembling many in the second division; and I suspect that a second long chain of hornstone projects from the east side of the rocks of that division, and passes by Baidyanath and Tiyur, in Virbhumi, to the hill in question.

In the well-defined parts of this third division, the rocks seldom rise into bold broken precipices, although in a great many parts they come to the surface; and in the channels of torrents have generally been laid bare. Their internal structure cannot, however, be so easily traced, as that of the second division, but still it may readily be perceived that it is stratified, for in some places I traced the same species of rock for a great way in one direction, while in the space of a few miles, crossing that direction at right angles, I observed a great number of different kinds, some of which reached a considerable way, while others could be traced in only one place. This implies that the strata are vertical, and that some of them are very wide, while others are narrow. The general direction of the strata seemed to run Easterly and Westerly.

In some of these strata the component parts were pretty uniformly scattered, thus forming granites and granitels, according as they contained 3 or only 2 ingredients; but in by far the greater number certain

plates or flakes, as it were, contained a greater proportion of one ingredient, and certain portions a greater share of the other, forming thus what by some is called Gneiss. The length of these plates is always disposed parallel to the general direction of the stratum, and the edges are vertical, or nearly so. There were also other stones, in which the component matters were disposed in what may be called *striæ*; that is, a great proportion of one of its component parts run horizontally through the others in lines parallel to each other, and to the direction of the stratum. Such stones have also been included under the name of Gneiss.

In many of these stones may be occasionally found vertical layers of white fat quartz, running parallel to the stratum, and entirely separating one part of the aggregated matter from the other, without producing the smallest interruption of substance; nor is the stone more easily broken there than anywhere else. In these stones, when entire, there is nothing like a schistose, or striated fracture; but in a state of decay, if exposed to the weather in certain situations, especially so that the rain may lodge on the surface, the stone gradually splits into thin plates like slate, and this seems to happen as readily to pure quartz, or to perfect granites and granitels, as to the gneiss. In other cases again, especially where blocks have been detached, the stone decays concentrically, and, of course, losing its angles first, becomes a rounded mass.

As none of these stones are applied to use, and are too far removed from the river to be thought of for carriage to a distance, I need not enter into further particulars; I have only to mention, that in Lakarde-wani, some of them, in a state of decay, form what is called Makar Mati, and consist of grains of white quartz, mixed with a white powder, which appears to me to be the felspar and mica reduced to one powdery substance. This is washed from the quartz, and makes a white wash for the walls of the houses, which, were it more generally used, would add much to the appearance of the country. It is most commonly found in iron mines, and its whiteness seems to be owing to the abstraction of the ferruginous particles, when these united in the form of ore.

It must be observed that in the decomposition of these aggregates the quartz is the part which resists destruction by far the longest, although it subdivides by numerous rents in all directions until it is reduced to sand. In many parts of this division the surface is covered with such sand intermixed with fragments of half decayed granite and masses of quartz from veins not yet reduced to sand or gravel, while the felspar has been totally, and the mica has in a great part, been washed away. Proper mica is indeed very indestructible, and broken into small portions remains for ages intermixed with the quartz in sand, but the black shorlaceous matter of this division seems to yield more readily than even the felspar.

Here also there are two kinds of calcareous tufa, the Ghanggat and Asurhar.

The former is exceedingly common, generally in small nodules scattered on the surface. The Asurhar, so far as I could learn, is found only at one place, the fork at the junction of the Tapsitari with the Kurar, which is near Jamdaha. It exactly enough resembles that of the source of the Angjana, and is covered by a little soil; but it is found on a level, and is intermixed with quartz, among nodules of which it has been deposited. Although it has been occasionally wrought, the depth of the stratum has never been ascertained, and the natives allege that the lower down that it has been dug, it has been found to contain less and less heterogeneous matter. I saw no traces of animal exuviae, but I had an opportunity of seeing so little surface exposed, that it may very likely contain many.

In some lands disputed between Kadar Ali and his former vassal Rupnarayan, and situated near the five hills (Pangch Pahar), I was told that a mine of lead had been discovered, and that this had added much to the bitterness with which the dispute was agitated. The mine was said to have been discovered by the priest of a village god, a man of very low caste (Mar). He conducted me to the spot and showed me a metallic vein, but I have heard it since alleged that I was intentionally conducted to a wrong place, and that both parties agreed to conceal the real mine; although in my tent

even, I could not prevent the agents of the two chiefs from squabbling and worrying each other. This violence may however have been mere affectation, and what I saw certainly was not an object worth dispute, but the pertinacity with which the natives adhere to disputes concerning trifles is very great. I cannot therefore say whether or not I was shown the proper mine ; I can only describe what I did see.

In the first place it must be remarked that the ore is not that of lead, but the foliated sulphuret of antimony, which the natives call Sorma. The priest showed me where he had dug an irregular trench, running from East to West, about 12 feet long, from two to four feet wide, and from one to two feet deep. In this space he said that he had found three ox-loads of the ore in masses from the size of a filbert to that of the fist, and on finding only small bits he had desisted from digging. He said that he found it intermixed with mouldering stone, but whether in a continued vein or in scattered fragments I could not understand. The ore he considered as lead, and had sold it as such to a merchant, who would no doubt sell it to the great who stain their eyes with this substance powdered. The gangue, or stone, in which the metal is found, is an aggregate rock of a palish green, or in some places of a rusty colour, and small grain. It is in general in such a state of decay that I cannot venture to guess at the nature of its component parts. In some places it coheres little more than sand, in others it is a soft stone. In almost every part of the gangue small detached bits of the ore may be found, and on digging and clearing away a part I found a vein about  $\frac{1}{4}$  of an inch thick, inclining from North to South at about an angle with the horizon of  $50^{\circ}$  and apparently running East and West. The extent of the gangue I cannot state, as it appears on the surface at the place only where it has been dug. About 15 yards from the place, towards the South East, is a rock of a very fine grained aggregate with a white opaque ground, and some greenish micaceous matter, probably a composition of felspar in decay with chlorite. In a torrent east from the mine, and perhaps 30 feet perpendicular below the surface, are two decaying rocks, one a fine grained whitish granite with black

shorlaceous specks, and I believe some small garnets ; the other consists entirely of black shorlaceous masses united together, and of a foliated texture. The five hills are immense naked masses of granite, and may be considered as belonging to the mineral division next to be described, which extends obliquely to the south, as it advances East from Jathaurnath.

Without digging at some expense, there is no saying how the mine might turn out, but there is nothing in its appearance to promise its being rich. A vein on the surface, thus suddenly diminishing, is, I believe, considered as a bad sign. Nor is a mine of antimony of any considerable value.

In many parts of this mineral division iron ore is found, but generally in such small masses that it would not answer for European manufacture, and the whole usually procured in a year would not perhaps fill much more than one of the Carron furnaces. Although the mining, or rather the gathering of the ore, is always conducted by the same persons, who smelt it and procure the charcoal, I shall defer giving an account of the processes until I treat of the arts, and shall here confine myself to an account of the mines.

✓ Adjacent to the branch of the second division, which strikes east to Jathaurnath, are several mines, at Kuji, Osla or Majra, at Belhar, Beldiha, Mongrar, Asnahatari and Rangga, where in all there may be 70 families that smelt iron. I had only an opportunity of examining the first mentioned place, but was told that the others were exactly similar. The smelters of Kuji winnow the sand brought down by torrents from the hills called Bara and Bharam, and during the winnowing very dexterously throw out the light siliceous matter, while the ore remains behind in small grains. On breaking these they appear of a black foliated texture, and are attracted by the magnet. The black iron ore in form of sand is found very common in some other parts of this mineral division of the district, especially after rain in the torrents of Lakardewani, but although it approaches very near the above ore, and only differs in its grains being rather smaller, it is in general neglected, yet these small grains found on the surface are generally admitted to make the best iron. The

pebbles found intermixed with the ore at Kuji are mostly quartz, but I found some which consisted of quartz aggregated with the black shorlaceous foliated matter, which I suppose is the common source of the iron ore of these parts.

A little way south from Kuji is Paharidihi, from whence iron mines extend all the way to Chandan village along the west side of the Chandan river. In this space there are at least 150 families of smelters. At Paharidihi the people collect the ore from torrents, just like those of Kuji, but it is found in grains as large as barley. After separating the quartzose matter by winnowing, these grains are broken between two stones and again winnowed. They consist of the same black foliated ore as that found at Kuji, and are attracted by the magnet. At Sijuya, seven miles from Jamdaha, the ore consists of similar small grains, but it is found mixed with earth and pebbles, in veins running three or four feet under the surface. The people dig shafts about a cubit in diameter until they reach the vein, which is from one to two feet thick, and they cut out the whole as far as they can reach, or venture to go from the little shaft. They then make another, and thus proceed over the field. The substance taken from the vein is then dried and winnowed, and then beaten and re-winnowed, as at Paharidihi.

A little south from Bhungri Simar I found the mine used by the smelters of that place, which is in the same line, and it differed in nothing from the mine last described, except that the metallic grains, instead of being mixed with clay, were contained in a white quartzose sand. Such is the nature of the mines on the west side of the Chandan river.

In the division of Lakardewani, on both sides of the river, are many mines ; but it was said that there are only about 100 houses of smelters. Those of Nuni say that they discover the ore by observing some of it on the surface, and then follow the vein by digging little shafts, as I have before described. The veins are nearly horizontal, generally covered by three or four feet of soil and clay, and the sides are of the same ; but under the vein are usually fragments of quartz, thickly imbedded

in clay. These veins or beds are never known to extend more than a bigah (45 yards) in length, and seldom reach so far ; they are from 1 to  $1\frac{1}{2}$  cubit in diameter, do not run in a straight line, and often send off lateral branches. The veins are never found on hills, nor near solid rocks. The Makar Mati, or decayed aggregate rock, is often found in the vein, but always in small nests, seldom containing above two or three mans. The whole vein is not ore ; this is found in masses, intermixed with clay, and sometimes with fragments of quartz. The mixed matter is taken out and dried, and then the earthy matter is separated by winnowing. The ore is then beaten small, and winnowed again, when it is fit for the furnace. The workmen are frequently interrupted by water, and have not attempted any means for draining their mines. The ore is reckoned of two kinds, Asul or principal, and Dusra or secondary. It is supposed that three parts of the latter give only as much iron, as two parts of the former ; but it has never entered into the imagination of the workmen to ascertain the proportion, either by weight or measure. I examined a mine of the Asul ore belonging to the smelters of Pokhariya, about four coses N. W. from Nuni. The ore is in irregular smooth concreations, from the size of a nut to that of a small biscuit, and is intermixed with clay and quartz, so as to form a hard substance that requires to be cut with a large chisel. The internal substance of the concretion consists of shining foliated black masses, much like that of the ores which I have hitherto described. It is attracted by the magnet. x

About five miles west and southerly from Nuni I examined mines of the Dusra ore, belonging to the smelters of Chanda Bathan, in the Mauza of Pandoriya. The one consisted of grains like barley, mixed with clay, and internally of a very fine earthy fracture, and pale reddish brown colour. Their specific gravity is small ; but the particles are slightly attracted by the magnet.

At Gamra, S from Dumka, about six miles, I examined another mine of iron, which differed somewhat from the above. The ore was found in horizontal strata, not above a foot thick, and covered only by from 12 to

18 inches of a red clay soil. The miners said that they never had gone deeper, having in many places found abundance of the ore. This ore is in small masses, like those at Pokhariya, but its structure is like that of the Dusra one of Chanda Bathan. It is not however attracted by the magnet. These masses also, before they are put into the furnace, require to be broken and winnowed.

At Dumka I visited a mine of a very different description, and which might perhaps give a supply to a forge of some considerable dimensions ; but it is not much valued by the natives, and has last year been deserted. For the space of about 40 feet square the people have made small excavations, and have taken out the ore to the depth of about a cubit. So far it consists of angular masses, from the size of the fist to that of the head, and compacted together ; but the fissures are filled with earth, which renders the ore easily wrought. Below this depth the mine becomes more compact, and the natives neglect it, as too troublesome ; nor has its thickness been ascertained. Neither has its horizontal extent been determined. Ore has been taken from the side of a tank, about 100 yards distant, and it is probable that the stratum extends at least so far. This ore has every appearance of a slag that has been in fusion, and is not attracted by the magnet. I saw nothing near it of a volcanic appearance ; but it is at no great distance from the hills of the eastern mineral division, among which there seem to me to be many traces of volcanic fire. The reason of its having been deserted, seems to have been its hardness, and the size of the lumps, which, before they are put in the furnace, require to be broken to small grains, and to be winnowed.

In this mineral division also, the enamel mentioned in my account of the first division, as investing pebbles lying on the surface, may in many places be observed.

#### SECTION 4TH.

##### *Minerals of the northern intermediate division.*

The proper minerals of this division, like those of the last, consist of aggregate stones ; but they rise in

broken peaks, exceedingly rugged ; nor can any of them be traced as extending to a distance in a peculiar line ; each rock or cluster of rocks is, as it were, insulated, and it would appear, that merely the summits of the rocks come to sight, and that their roots sink very abruptly, as the rocks are in general at very considerable distances from each other, and between them is found a level country, consisting of soil in which no fragments of broken rock are to be found, unless we consider clay and sand to be such. The most remarkable of these clusters are the three rocks in the river at Kahalgang, three small hills thereon the continent, the hill of Bhader, the peaks of Barkop, a rock between Kahalgang and Bhagalpur, the two rocks at Sultangunj, Dholpahari, north from Kharakpur, Chauthiya pahar, south-east from Tarapur, Rangganath, Ungchanath, and Gauripahar, all south from the same, Mandar, west from Bangka, and Pangchpahar, south-west from thence. The two hills, named Kharai, south-west from Bhagalpur, and Khajuri, south-east from Tarapur, are of a different nature, and seem to me scattered portions of the second division. The aggregates of the fourth division, as well as of the third, are both granites and gneisses, and some of both are very well fitted for building ; but in this climate both have a great disadvantage ; when exposed to the air, they soon are covered with a black mould, that renders them very ugly. Fine blocks of grey granite, with a pale reddish cast, might be procured close to the water's edge from the rocks of Sultangunj and Kahalgang ; and the rock of Dholpahari is a beautiful fine-grained gneiss, very fit for building, and at no great distance from water carriage.

In this part of the district also, calcareous detached nodules are common, and on the little hills, which overhang the river immediately below Bhagalpur, are burned for making lime. I nowhere saw the calcareous tufa in mass, nor are there any mines or pebbles encrusted with brownish enamel.

The most curious mineral phenomenon in this part is found in certain places which are covered with carbonate of soda, called by the natives Kurwa Mati, and collected occasionally by the washermen of the vicinity, and used by them to clean linen. It

is said to be found a little south from Bhagalpur and I examined the places between Patharghat and Paingti, where it is also found. These last places are on the skirts of the first division, and might be considered as belonging to it ; but the same substance found south from Bhagalpur connects this production with the fourth division. The most remarkable place is in Mauza Habipur, said to be about five coses west from Paingti. It is on the edge of the plain, inundated by the Ganges, but adjacent to the high land, and extends about 50 yards in one direction by 30 in the other. Between it and a creek, which joins the Ganges, are some fields higher rather than the saline space ; but at least three or four days every year the floods rise over both, cover the saline space from knee to waist deep, and of course sweep away every saline particle. In the month of October, however, the saline matter begins to effloresce on the surface, which is covered with short grass. The washermen scrape the surface, and beat the saline matter from among the roots, and throughout the whole dry season this may be occasionally repeated ; but in the rainy season, even when the space is not covered with water, no saline matter is procurable. The most singular thing is that near the middle of the field in January I found a small well, which appeared to have been lately dug. It was not more than three feet deep, and contained about one foot of clear sweet water. I was assured by the neighbours, that similar water may be procured in every part of the saline space, and that every dry season those, who labour the adjacent fields, dig a well, such as I have mentioned, which gives them a supply of water, but is filled by the next inundation. The saline matter is therefore constantly forming ; but it is only in dry weather that it can accumulate, and it is found entirely at the surface. I shall not, however, until farther investigation, take upon myself to say whether the component parts come entirely from the atmosphere, or whether the metallic basis of the soda rises in vapours from the earth, passes through the water as an insoluble substance, and on reaching the surface, instantly unites with the part of the air, usually called oxygen, and thus forms the soda.

## SECTION 5TH.

*Of Springs and Wells.*

In the hilly parts there are many springs, but few are very considerable, and the number is not sufficient to give the inhabitants a copious supply of water ; and as they have not there attempted to dig wells, they are very indifferently supplied, and are often under the necessity of going far in search of this most valuable necessary of life. In the plains, at a distance from the river, abundance of water is found in wells, and in general at a very little depth, and of a good quality ; although at Ratnagunj the well water is hard and ill-tasted. Near the Ganges, in most parts the wells are deep, and their water is often hard and very indifferent, especially if found in red sand or clay. At Gopalpur, near Suryagarha, about seven years ago, a tank was dug 45 cubits deep, and no water having been found, a well was sunk four or five cubits farther. A stake was then driven two cubits into the ground when the water gushed out, and in about three hours filled the tank. It was expected that the water of this tank would have been uncommonly good, but the spring seems to have failed, as in the dry season the tank does not contain above 8 or 10 cubits of water, and that as usual exceedingly dirty.

In this part I shall chiefly confine myself to an account of the hot springs, which in fact are numerous, but are confined to eight places, of which the five first are contained in the second mineral division, the next two are contained in the third division ; and the spring mentioned last belongs to the first mineral division, which perhaps shows, that the strata of minerals found on the surface extend a very little way only into the bosom of the earth.

The first hot spring that I shall mention is Sitakunda, the fables concerning which have been already detailed in my account of the topography of division Munger. It is situated on a plain near the Ganges, about four or five miles from Munger ; but all through the plain at little distances, are scattered small rocky hills of quartz or siliceous hornstone, and the stones from among which the hot water issues, are of the same nature ; but, so far as I can judge, are all detached pieces. A cistern of

brick has been built to include the springs, and forms a pool about 18 feet square, so that one cannot judge so well of their nature, as in the places that will be afterwards mentioned ; but it would not appear that any one spring in this division differs from the others by any material circumstance, only that Sitakunda is at a little distance from any hill, and all the others issue from the bottom of rocks. At different places many air bubbles rise from the bottom, and generally many issue at one time, with irregular intervals before the next explosions. Near where these issue, the water is always rather hottest. I visited this spring first on the 7th of April, a little after sunrise. The thermometer in the open air stood at 68° Fahr., and in the hottest part of the reservoir, where many air bubbles rose it stood at 130°. The priests said, that about eight days before it had become cooler, and that the heat would gradually diminish until the commencement of the rainy season. I visited the spring again on the 20th of April at sunset, the wind having been all day hot and parching : the thermometer in the air stood at 84° ; in the well it rose to 122°. On the 28th of April I visited it again a little after sunset, the wind blowing strong from the east, but not parching. The thermometer in the air was at 90° ; in the well it only rose to 92°. The water still continued clear ; but soon after, owing to the reduction of the heat, and the natives being of consequence able to bathe in the well, the water became so dirty as to be no longer drinkable by an European. Indisposition for some time prevented me from being able to revisit the place ; but in the beginning of July, on the commencement of the rainy season, the water in consequence of a return of heat, became again limpid ; and on the 21st of that month, a native sent with the thermometer, found at sunset that it stood in the air at 90° and in the water at 132°. In the evening of the 21st of September, the thermometer stood in the air at 88°, in the cistern at 138°, and the number of air bubbles had very evidently increased. The priests, in order to magnify the wonder of the hot spring, have made several cisterns round it, and these at all seasons contain cold water, but exceedingly dirty ; nor could I perceive any appearance of their containing springs ; the

water which they contain, seems to be the rain preserved from evaporation.

I saw no appearance of earthy depositions from the waters of Sitakunda ; but it is very likely that there may be such on the stones in the bottom, as such depositions are seen at more considerable hot springs of the district. It is indeed usually supposed that Sitakunda is pure water ; but on evaporating about  $4\frac{1}{4}$  quarts to about  $\frac{1}{4}$  pint in a clean iron vessel, I procured about half a dram of earth. This effervesced with nitric acid, which however dissolved only a part ; the residuum of the water after evaporation was tasteless ; nor did it show the smallest cloud on the addition of a nitrate of silver. The water is however clear, and the heat prevents it from being polluted by the natives, or other animals.

About five or six miles south from Sitakunda, at the western foot of the ridge running south from Mungger, and at a place called Bhurka, is the second hot spring, which arises from three sources that unite in one pool, perfectly in a state of nature, and form a stream nearly of the same size with that of Sitakunda. Two of these come from under a rock of red and grey rude jasper, and are not accompanied by air bubbles ; the third rises at a little distance from some spouty ground which occupies a considerable space, from different parts of which the water oozes accompanied by air bubbles, which do not issue regularly, but by a kind of explosions, repeated at short intervals. On the 9th of April in the morning the thermometer, in all the three sources rose to  $112^{\circ}$ . In this spring also I observed no stony deposition from the water.

The third hot spring is at Rishikunda, about a mile south from the last, and at the foot of the same hill. This spring has been made a place of worship, and a reservoir has been built to collect the water into one pool. This is about 140 feet square, but is rather ruinous, and the springs are unable to heat so large a body of water, so as to prevent vegetation or bathing. The pool, therefore, especially on the side most remote from the sources, is overgrown with aquatic plants and bushes, filled with vermin. The bottom of the pool is in some places sandy, in others rocky, and the water seems to issue all along the

western side, from different crevices in the rock. The air bubbles rise from the whole extent of the pool near the hill, and come mostly from the bottom, for a space perhaps 30 feet wide, and 140 feet long ; and had the pool been confined to this extent, its heat would have kept it clean. Where the air bubbles issue from among sand, they form a small cavity like a crater. In the centre is a small rising with sundry perforations [see in the sketch (*a*) Drawings No. 23] through which the air always rises in small bubbles ; but every now and then a kind of explosion takes place, an accumulation of air bursts the small rising of the centre, forces its sand (*c*) to the surface of the water (*dd*) and when it subsides, adds to the size of the little circular mound (*bb*) by which the crater is surrounded. When I reached the pool, in the morning of the 8th of April, the thermometer in the air stood at 72°. In the water, where it issued from the crevice of a rock, it rose to 110° ; and in one of the craters to 114°. In this spring also I observed no deposition from the water. The stream appears to be rather more considerable than at Sitakunda.

About 15 or 16 miles south from Rishikunda are the hot springs of Bhimbandh, by far the finest in the district. They issue from the bottom of a small detached hill, on its east side and at a little distance from the Man river, which receives their water, and which rises from another detached hill, a little way farther south. The hill from which the hot springs issue, is situated east from the great irregular central mass of the Mungger hills, and is named Mahadeva. It consists, so far as can be seen, of quartz or siliceous hornstone. The hot water issues from four different places, at some distance from each other ; and at each place, it springs from many crevices of the rock, and from between various loose stones, with which the ground is covered. Each of these four sources is by far more considerable than Sitakunda, and many air bubbles accompany the water, which is limpid and tasteless ; but evidently contains earthy matter, as the stones, from whence the very hottest parts issue, are encrusted with a tufaceous deposition, which very much resembles the calcareous tufa, but does not effervesce with the nitric acid, unless the separation of a few globules of air

on its first immersion can be considered as such. These globules, however, appeared to me to be merely air contained in the little pores of the deposition which remains unaltered in the acid, and is probably siliceous. I have no doubt, however, that the water of Bhimbandh, as well as that of Sitakunda, contains also calcareous earth ; but this, being more soluble than the siliceous, is not so soon deposited. The stones, from among which the water issues, are warm ; but not near so much as the water, nor so as to be disagreeable to the touch. The thermometer on the morning of the 21st of March, in most of the sources stood at  $144^{\circ}$ ; but, when immersed in places, where many air bubbles issued, it rose to  $150^{\circ}$ .

The water of the Man river, near the springs, is somewhat hotter than the atmosphere. In the latter, about eight o'clock in the morning of the above mentioned day, it stood at  $76^{\circ}$ ; in the river it rose to  $82^{\circ}$ . In one place of the stream I observed some air bubbles rising, and there, although the stream is pretty considerable, the thermometer rose to  $98^{\circ}$ .

The 5th hot spring is at Malinpahar, about seven miles east and north from Bhimbandh, and this spring is the source of the Angjana river. It is not so large as the Bhimbandh, but exceeds much any of the other hot springs. It issues from the bottom of Malinpahar, a part of the central cluster of the Mungger hills, where a space of about 20 yards in length, and 20 feet in width is covered with fragments of rock, and the water may be heard running under these, and in some places seen through the crevices, until it comes to the lower side, and unites into little streams, that soon join. The stone, from among which the water issues, is a kind of jasper of a horny colour stained with red. On the 22nd of March, at sunrise, the thermometer in the air being at  $62^{\circ}$ , on being placed on the stones rose to  $80^{\circ}$ , on being immersed in the water flowing among the stones it rose to  $146^{\circ}$ , and on being placed in a crevice of the rock, from whence the water issued accompanied by air bubbles, it rose to  $150^{\circ}$ , which at all springs is probably the maximum of heat, and the others probably as well as Sitakunda suffer a diminution of temperature, when

the season advances. On the stones, where the water issues, I here also observed a small quantity of earthy deposition. About 20 yards east from the hot springs is a bed of calcareous tufa, that has been already mentioned. In pulling out a stone that had been surrounded by this concretion, I found it warm, although perfectly dry, and the thermometer on being placed in the cavity, rose to 90°.

Of the two hot springs, that are contained in the 3rd mineral division of the district, I visited only one, which is called Tapnai. This, in the dialect of the vicinity, is said to imply merely heat; although Tap in the more polished dialects is now generally confined to the heat of fever. The spring is situated in Palasi Mauza, about a mile east from Lakardewani, just beyond a fine little river called the Gurguri. The water rises from a field sloping gently towards the river, and commences cold from some spouty ground, and, having passed through this for a little way, reaches a rock of gneiss in a state of decay. At the side of this rock, the spouty ground is about 10 feet wide, and the water and sand are hot, while at irregular intervals air bubbles issue from the latter, not very numerous, but pretty large. Where most of these issued, in the dusk of the evening of the 28th of November, the thermometer, which in the air stood at 72°, rose to 148°.

The stream, formed by the oozing from this spouty ground, appeared to be somewhat less considerable than that of Sitakunda.

The other hot spring of this division is said to be in Mauza Nunbil, S. E. from Nuni about 15 coses, on the south side of the Kendu rivulet at Kendughat, and near the village called Sapchala.

The hot spring belonging to the 1st mineral division I did not visit, as I did not hear of it until I had passed to a great distance from the vicinity of where it is. The spring is called Unahi, and is said to be situated in the lands of a village called Pukhariya, which for many years has been deserted, and is situated about four coses N. W. from Beliya Narayanpur, a great iron manufactory in Virbhumi. The water of the spring is said to be very bad, which would seem to imply, that it

may have strong mineral impregnations, but the natives detest the limpid and tasteless water of Bhimbandh and Malinpahar, and prefer the water of a muddy tank.

From all the circumstances attending these springs, I think it probable, that the heat is first communicated to some gaseous fluid, and this rising, until it meets the water of a spring, heats it, and issues in part along with it. The original cause of the heat may, therefore, be seated very deep in the earth ; in the superficial strata there are certainly no materials to the mutual action of which it can be attributed.

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ACCOUNT OF THE DISTRICT  
OF  
**BHAGALPUR.**

BOOK IV.  
OF THE STATE OF AGRICULTURE.

INTRODUCTION.

In the first statistical table I have supposed that there are in this district 2974 square miles actually occupied for cultivation, houses, gardens and plantations, besides 145 square miles belonging to the tribes of mountaineers, and cultivated with the hoe. In my account of the topography I have, however, had occasion to mention that for the last two or three years, on account of a deficiency of rain, a very great proportion of the rice land has not been sown, and this will reduce the extent cultivated for these years to 2722. Such occurrences, however, being very rare, in the general tables of occupation and produce I have taken the extent and amount on the average of years, when the whole has been cultivated ; and in order to form an estimate for such unfavourable seasons, we may deduct from the quantity of rice stated in the tables the produce of 252 square miles, or 483,840 bigahs. In Table No. 13 will be found an estimate of the manner in which the lands are disposed, and in the 20 Tables, from No. 14 to No. 23 inclusive, will be seen an estimate of the quantity and value of the produce of the district, omitting the division of Chandrapur, too trifling to admit of calculation, and the lands belonging to the two tribes of mountaineers. In Table 34 will be found an estimate of the total produce of each article of cultivation, together with its value, and the quantity required for seed, and left for consumption. Referring for many particulars to these Tables, and to the accounts of former districts, I proceed to state what I observed in this district that differs from former details.

## CHAPTER 1ST.

### OF THE VARIOUS ARTICLES CULTIVATED.

The proportion of land, that gives two complete crops in one year, seems to be smaller here than in Puraniya ; but the custom of mixing several things, as one crop, on the same field is more prevalent than in any place that I have yet seen; and there are a greater variety of articles cultivated. On these subjects I have nothing new to offer.

A considerable quantity of seed is sown, without previous cultivation, in both the manners mentioned in my account of Puraniya, and in this district the practice seems to have been extended farther, not only in proportion to the quantity of land, but to the number of articles sown. This seems to arise from a greater degree of indolence ; but I nowhere heard of there being fields so far neglected as to produce spontaneous crops of rice.

#### SECTION 1ST.

##### *Of the plants cultivated for their grain.*

#### PART 1ST.

##### OF CULMIFEROUS PLANTS.

Rice, although of less importance, than in the districts hitherto surveyed, is by far the greatest crop. It is of six kinds, which differ in season of reaping, but some of them derive their names from other circumstances.

The Boro or Bora ripens in spring (Vaisakh), and its manner of cultivation has already been sufficiently explained. Some is reared on the lakes near Rajmahal and a good deal on muddy sloping banks of the Ganges. The fishermen raise a great proportion of the whole.

The Jali rice is a very coarse grain sown broadcast on very low land, and reaped in the end of Asharh and beginning of Sravan, that is in July, and seems to be the same with the Borna or Joli of Ronggopur. It is confined to the eastern corner of the district.

What I have called summer rice is in Behar called Bhadai, and in Bengal Bhadui or Aus. It ripens between the middle of July and the middle of October. It is the same with the Kanal or Kandari of Ronggopur. A considerable proportion of this rice is here transplanted, and is somewhat finer than what is sown broadcast.

The Sathi rice of this district is the same with the Aswini of the districts hitherto surveyed. It derives its name from ripening in 60 days. It is cut between the middle of September and the middle of October, and will grow on inundated lands where the water does not rise to above 6 feet.

In a few parts is sown a kind of rice called Kartika or Khangdi, the former because it ripens between the middle of October and middle of November. It is sown broadcast, and is rather coarse.

In the Hindi dialect of this district the winter rice is called Aghani, because it begins to ripen between the middle of November and the middle of December; but the harvest usually lasts until about the 10th of Magh or 22d of January. A great deal of it is sown broadcast, and is coarse, but it is not here the custom to sow this intermixed with the summer kind. In the eastern parts of the district one kind, Aman, is sown broadcast in spring, and grows as fast as the inundation rises, even where the water is 7 cubits deep. The stems are then often 10 or 12 cubits long. Most of the land, which produced the finer transplanted kinds, has for these last 2 or 3 years been fallow, on account of the want of rain: but in Mallepur, in good seasons, there is much of the best quality, such as at Calcutta is called Patna rice. The term Sali is here in general by no means confined to transplanted rice as in Ronggopur; all rice land in general is here called by that name.

The seed for broadcast land is always sown, without preparation, when the earth is tolerably dry; and here the same is usually done, even when the seed

is intended for being transplanted. This management in the Behar part of the district is called Rasbiya, and in the Bengalese part Dhula bichhon. The sprouted kind, sown on ground reduced to a mud, is very little used. From 2 to 4 twentieths of the land intended to be transplanted are sown with the seed; but by far the greater part of the seedling land is replanted, perhaps, however,  $\frac{1}{2}$  Katha on the bigah or  $\frac{1}{40}$ th part of the rice land may on this account produce no crop. Dibbling the seed is not in use. The quantity of seed required for a bigah of land will be seen from the tables.

The broadcast rice is weeded with considerable care.

In Kalikapur I saw that the rice as it approached maturity was laid flat down as in Dinajpur, but I nowhere else observed this custom. The reasons assigned in Kalikapur were that it prevented shaking, and enabled the reaper to cut the straw by the roots. In most parts here the ears only are cut.

Except in great towns, clean rice is seldom brought to market: it is mostly sold in the husk, and the women of each family beat what it consumes; but women in easy circumstances do not undertake a labour so severe, and poor women are hired: men never undergo the labour. It is mostly performed by the pestle moved by a lever (Dhengki).

The reward for this operation was stated at different places as follows. At Bhagalpur and Munger, when the rice is cleaned by boiling, the merchant gives 65 sers of rough rice and receives 40 sers of clean. According to the experiments, which I made in Dinajpur, the cleaners would have rather more than  $48\frac{3}{4}$  sers of clean rice and, giving 40 to the owner, would have for their trouble  $8\frac{3}{4}$  sers, or about 18 per cent of the whole grain. Three women at Munger clean daily 65 sers (84 S. W.) of rough rice and of course each receives upwards of  $2\frac{1}{2}$  ser (2. 61) or  $5\frac{1}{2}$  1b. (5.626) of clean rice, but works all day.

At Rajmahal the merchant gives 60 sers of rough rice, and receives  $37\frac{1}{2}$  of clean. According to my estimate the cleaner has on this rather more than  $16\frac{1}{2}$  (16. 6) per cent. of the grain. Three women there clean 60 sers (92 s. w.) a day, so that each for a whole day's work gets almost lb. 6 (5. 9) of clean rice.

Very little of the rice is prepared into Chura, Lawa or Murhi, and the poor for breakfast use chiefly meal, either parched or without having undergone that operation, and made either into cakes (Roti), or into a kind of pudding (Chhattu). Rice is seldom made into meal.

Wheat next to rice, is the culmiferous plant cultivated in the most considerable quantity. It is used in the same manner as in Puraniya. At Rajmahal and Mungger abundance of Mayda or fine flour may be procured ; and there are bakers who make bread both after the European and Hindustani fashion. At the capital also there are bakers; but the Mayda must be brought from other places.

Wheat is sometimes sown without any previous culture, and near the Ganges, on some overflowed land, requires only one or two ploughings ; but in higher parts it requires seven or eight. In the interior again, on the low land near the torrents, the fields of wheat are watered once or twice a month : and sometimes the field is watered immediately before it is sown. In most places towards the western side of the district, on both sides of the river, the wheat is sown in drills, which are about a span's distance from each other.

Barley next to wheat is the most common culmiferous crop. A very little is sown without previous culture, and some after one or two ploughings. Like wheat, where the land is stiff, it is usually sown in drills. A great deal is sown mixed with the field pea ; both are reaped together, and the grains are used intermixed, and called Jaokerao. In the western parts of the district this is one of the common foods of the poor.

Next to barley the most common culmiferous crop is maize, called in the Hindi dialect Barka-Janera, Makai and Bhutta. The Bengalese have scarcely yet obtained any name to distinguish it from the Janera. By the northern tribe of mountaineers it is called Tikal. The dry stems are only used for cattle, when Bhusa cannot be procured. This is the grain most suited for the higher lands of this district wherever the soil is good, and in time will no doubt supersede most of the others, especially rice, which at present is too much cultivated, and ought to be confined to favourable spots. The maize is

used both in cakes (Roti) and puddings (Chhattu), and the people have entirely lost the prejudice of considering it unwholesome.

The next culmiferous crop is Maruya, or the *Eleusine* of Gaertner, which by the northern tribe of mountaineers is called Kodom. On the plains it is reckoned only of one kind ; but on the hills of the northern tribe of mountaineers it is divided into two kinds, one of which is gathered in Aghan (middle of November to middle of December), the other is gathered in Bhadong, or three months earlier. My authority for supposing that the Kodom of the mountaineers is the *Eleusine*, is their saying that it is the same with the Maruya of the plains : but such a difference in the time of ripening leads me to suppose that the Kodom, which ripens about the end of November, is not of the same species with the other, and may perhaps be the Gundbi to be afterwards mentioned, which ripens at that season.

The Kheri mentioned in my account of Puraniya is in this district the next most considerable of the culmiferous crops. It is a very poor grain, and can only be used boiled like rice ; its meal is very bad, and the straw is bad fodder. There are two kinds ; Kheri properly so called, and Samora Kheri. These differ in the season of harvest, but the Kheri proper is again subdivided into four or five kinds, such as Girgitiya, Muthiya, Jhabri, &c., which differ a good deal in size and appearance, but are only to be considered as what botanists call varieties of the same species.

The poor millet called Kodo, and mentioned in Puraniya, next to the Kheri, is in this district the most considerable of the culmiferous crops ; and much is sown on the low lands near the Ganges. It is a species of Paspalum, and perhaps may be the species which in the *Encyclopedie Methodique* is named *coromandellianum*, although in some points it differs from the description given in that work. It is used both boiled like rice and parched, ground, and made into a kind of pudding. It does not form cakes. It sometimes occasions vertigo or intoxication, and this quality is confined to some parcels of the grain ; all those who eat of such being affected, and the same field will one year produce intoxicating

Kodo, and on the next that which is perfectly innocent. This narcotic quality is by the natives attributed to the grain on certain fields, having been infected by a kind of snake called Dhemna, a large poisonous serpent. This opinion is however very improbable, and the intoxicating quality seems more likely to proceed from some spontaneous seed, not readily distinguishable, being intermixed with the Kodo of certain fields. The straw is eaten by cattle.

Next to Kodo the China, mentioned in former districts, which is the *Panicum miliaceum* of botanists, is here the most considerable of the culmiferous crops, and uncommon pains are bestowed on its cultivation, considering that it is a poor grain; but it thrives here vastly more than anywhere else that I have yet seen. It is divided into 5 kinds, Vaisakhi, Asharhi, Bhadai, Kartika, and Maghi, according as it ripens between the middle of April and middle of February, for, owing to the pains bestowed on the cultivation, its growth is conducted at almost every season of the year. The fields of that which ripens in April are divided into little square plots like a garden, and regularly watered. The produce is said to be very great, and from the seed, which is shaken in reaping, a second crop which comes up without any cultivation or trouble, is called Labhera, and is cut about the end of September. China is chiefly used in what is called Mara. The grain is first boiled a little, the water is then poured off, and the grain is heated in the same pot. It is then thrown in small quantities into a hot earthen, vessel, the bottom of which is covered with sand, and is parched, which bursts the husks and makes the grains swell. The husks are then separated by rubbing or beating. This Mara, mixed with sour curdled milk, is much used at marriages, and in many parts of the district is considered an indispensable part of the marriage feast, perhaps from this grain having been the first that was reared in the country.

Next to China the most considerable culmiferous crop of this district is Janera. I have usually considered this plant as the *Holcus Sorghum* of botanists, but there are several kinds which by some botanists are considered as distinct species, and by others are held to be accidental

varieties ; while in general the characters given to distinguish what the botanists consider as distinct species are not very applicable to mark the kinds with which one meets in India. The people here, as well as in the adjacent part of Puraniya, talk of three kinds as distinct, Gehungya, Narkatiya, and Raksa, and for each kind have several synonyms. The Gehungya, I found, was also called Chauliya and Bara; the two former names are derived from its resemblance to wheat and rice ; the last name comes from its great size. This kind by the northern mountaineers is called Naltu. It agrees with the *Holcus compactus* of the Encyclopedie, in having its spike recurred ; but the grain is not so closely compacted as is described in that work. The Narkatiya I have not seen. The Raksa is also called Sisuya, and may be the 4th variety of the *Holcus Sorghum* described in the Encyclopedie, having an erect spreading spike. Janera is fitted for the same kinds of land with maize, but seems a very inferior grain, especially as it is very difficult to preserve from birds. In this district it seems to be gradually giving way to the maize and will probably be soon altogether neglected.

The Bajra or *Holcus spicatus* is to be found in a few gardens as a kind of curiosity, but in such small quantities that it cannot be included in the tables of produce.

Next to Janera the most considerable of the culmiferous crops is the gundles but it is chiefly confined to the southern parts of the district, which in soil resemble Mysore and this grain is the same with the Shamay, which in my account of that country has been so often mentioned, and is the *Panicum miliare* of the Encyclopedie. There is said to be another kind called Neuya-gundli, but, as I did not see it, I cannot say whether it is a variety of the common Gundli or a distinct species. In this district the smallest of the culmiferous crops is the Kaun or Kangni which is the *Panicum italicum* of botanists, a grain much superior to most of those mentioned. The number of small birds that are most rapacious after its grain is assigned as the reason of its being neglected. It is chiefly reared by the hill tribes, the northern of which call it Petaga.

## PART 2ND.

## OF LEGUMINOUS PLANTS.

These here are very important, and, as in Puraniya, the most common is the Mash-Kalai, which in the Hindi dialect is most usually called Urid or Makh. It is a species of *Phaseolus*, which I cannot refer to the description given in any botanical author. There is a variety of it called Aghani Kalai, which differs in nothing almost from the Mash-kalai, but that its seed, instead of being green, is brown, and it ripens about a month earlier. Concerning this plant I have nothing to say in addition to what has been mentioned in my account of Puraniya, as it is used here exactly in the same manners.

The pulse next in importance to the Urid is the Arahar or *Cytisus Cajan*, which grows with uncommon luxuriance. All that I have said concerning it in my account of Puraniya is entirely applicable to this district. The Vaisakhi is that most commonly reared, and is allowed the best soils. In fact I know of no finer crop that could be possibly encouraged than maize mixed with this pulse, and a very large proportion of the waste land is fit for producing such. The Vaisakhi kind by the northern tribe of mountaineers is named Gol-Lahari, the Maghi kind is named Mal Lahari.

Great quantities of the Khesari or *Lathyrus sativus*, often already mentioned, are reared, especially among rice stubble.

Next in importance to the Khesari are the two varieties of the *Cicer arietinum*. That with the red flower is called But or Chana, and is by far the most common. That with the white flower here also is called Kabalibut.

Next to the But the most important pulse is the Kulthi mentioned in my account of Puraniya.

Next again to that is the common-pea (*Pisum*). A kind called Kabali or Kusi Matar has white seeds like the garden-pea of Europe (*Pisum sativum*), but I have not seen the plant growing and cannot say whether it belongs to this species or to the field pea (*Pisum arvense*) to which the other varieties belong. The field-pea is of

two kinds called, from the seasons at which they ripen, the Maghi and Vaisakhi Matar or Kerao, these two latter words being synonymous, the former in the Bengalese and the latter in the Hindi dialect.

Masur, or the *Ervum lens*, or lentil, is the pulse of next importance, and has been already sufficiently mentioned.

Next in importance to the lentil is the pulse which in this district is called Bora or Ghangra, and has been mentioned in my account of Puraniya. I had here an opportunity of examining it, and find that it is the *Dolichos Catiang* of modern botanists, that is the *Phaseolus minor* of Rumphius (vol. V, page 383 plate 139). Among the mountaineers it is much cultivated, and in the language of the northern tribe is named Kusora.

The Chhota Ghangra or Muthiya Bora of this district I had an opportunity of examining here, and found that, far from being the same with the Lubiya of Ronggopur, it seems to differ almost in nothing from the last, except in having its seed vastly smaller. It must however be observed that when reared among the stems of maize, where it finds a support, it climbs just as much as the other, and, except in the size of the seed, I can perceive little difference between the plants.

Next to the Ghangras in importance is the pulse called Meth Kalai, which appears to be the same with the Khyeri of Ronggopur, but the flower appeared to me larger, and I did not see the plant in all its stages. I am now convinced that I followed Linnaeus too far in admitting the *Phaseolus minimus* of Rumphius to belong to the Linnaean genus *Phaseolus*, and that I was mistaken in considering it the same with the Khyeri of Ronggopur. I think it now probable that it belongs to the Linnaean genus *Dolichos*, and is the lesser Lachhrakali of that district, while the *Phaseolus minor ruber* of Rumphius is the greater Lachhrakali.

Next in importance to the above are the pulses called Harimug, and Sehamug or Mahananda mentioned in my accounts of Puraniya. In this district I saw neither one or other in a state fit for examination. The latter is the most common. Among the Bengalese here it is called Krishnamug.

The Tulbuli mentioned in my account of Puraniya is the pulse of next importance.

Next to that is the Bhetmash mentioned in the same account.

The least important of the pulses is one called Sutrakalai, which I have not seen.

### SECTION 3RD

#### *Of Plants giving oil.*

The natives speak so confusedly concerning the cruciferous plants, which produce oil, that I cannot treat the subject with very great confidence, but so far as I could learn the following are the kinds cultivated in this district.

The Sarisha, Turi, Lotni, Gota, and Maghuya or Maghi Rayi are in general considered as the same species, and it is the one most cultivated, but it must be observed, that among the southern woods, where the name Lotni prevails for this species, another kind, the *Sinapi amboinicum* of Rumphius was brought to me as the Sarisha. The plant of which I am now treating as the most commonly cultivated for oil in this district, is the same with the Sorisha of Dinajpur, and with the Kajoli of Ronggopur.

Next in quantity to this is the Rayi, or Reingchi, of most parts of the district, as well as of the others surveyed, which is the *Sinapi amboinicum* of Rumphius; but, as I have said, among the southern woods this was called Sarisha, while at Paingtia a plant with compressed seed vessels much like the former only much larger, was called Rayi, and the *Sinopi amboinicum* was called Gang-rayi. The seeds of both have probably the same qualities, on which account they are inextricably confused by the farmers, although in a botanical view the two plants are abundantly different. It is not in my power to say which is meant in the tables of each division. Only I know that the *Sinopi amboinicum* with the small quadrangular seed vessel was called Gangrayi at Paingtia, Reingchi at Kodwar, Sarisha at Bangka, and Rayi at Suryagarha; while the kind with the large compressed seed vessels was called Rayi at Paingtia. In the tables, perhaps most

accurately, the Sarisha, the Rayi or Reingchi, and the Gangrayi are considered as three distinct species. Both the Rayi and Gangrayi are frequently sown on the inundated land without previous cultivation, but the latter is not cultivated to a great extent.

Next to the Rayi or Reingchi in importance is the Sarshong called also Piri, which has a very long compressed seed vessel, like the Rayi of Paingtgi, but its seeds are quite smooth, while those of the Rayi are finely reticulated. Its seed also does not possess the heat of mustard.

Next in importance to this is the Gangrayi above mentioned. Its seed is hot.

Next in quantity to the above is a plant called Seuti Sarisha which I did not see, but suspect that it is the species of Radish cultivated in the districts formerly surveyed, as in some parts of Puraniya this plant was known by the same name.

In this district there is another kind of plant with a seed hot like mustard, and called Ghora rayi. It is not to be found in the tables of produce, because it always is sown intermixed with the other kinds, that have hot seed, and only in a very small quantity, nor have I heard any good reason assigned for the practice. Its seed-vessel is very small, scarcely more than half an inch in length.

The oil expressed from all the above kinds of cruciform plants in the Hindi dialect of this district is called Karuya tel or pungent oil, although the different kinds vary much in the degree of this quality.

Linseed, next to the two first mentioned kinds of the cruciform oil-seeds, is that of greatest importance, and in this district is most usually called Chikna.

Next to the Sarshong in extent of cultivation is the Til or sesamum, which in the hilly parts of the district thrives remarkably on new cleared land, especially on a red soil, however poor. It is of two kinds, Til and Charak til, but I do not know how, in a botanical sense, they can be separated as species. The former is by far the most common, and is the same with the Krishna Til of Bengal, having very black seed, while that of the Charak Til is not so dark. Both have their leaves occasionally ternate, laciniated or simple, and I suspect include

the three species called by botanists *Sesamum orientale*, *indicum*, and *laciniatum*. They are the *Carela*, and *Schitela*, that is the black and white sesamums of the *Hortus malabaricus* (Vol. 9, plate 55, and 54). In a few of the wilder parts the oil is mixed with that of rape seed and eaten, but in most parts the natives loath it, although, on account of its wanting the pungency of cruciform plants, it is usually called mitha or sweet oil.

*Ricinus* in the parts near the Ganges is a very considerable crop, and I have nowhere seen it growing with such luxuriance as in the division of Gogri. In the Hindi dialect it is called Erengri, and here also is said to be of two kinds, Vaghendi and Chanka. The former is the *Ricinus communis*, W., and the latter is the Pandi avenacu of Rheeude; but here it is never allowed to survive one year. For seed it is reckoned inferior to the other, as its capsules, when ripe, split, and scatter the seed, while those of the Vaghendi do not so readily open, and give leisure for the whole to ripen and to be gathered without loss. The oil made here is often exceedingly good and clear and is excellently fitted for the lamp; so that it may be burned in the houses of Europeans, and in glass lamps without disgust; but such is seldom, if ever, employed by the natives. This fine oil has, I believe, been often sold as castor-oil, procured by expression; but Bhagalpur is famous for sophistication; and after careful inquiry I have reason to think, that this is not an expressed oil, and that the following is the process by which it is extracted.

Break the hard inner shell integumentum of each seed between two stones, pick out the kernels, and beat these in a large mortar, adding a little water to form a tenacious paste. Put  $2\frac{1}{2}$  sers of the paste in an earthen pot, with 4 sers of water, and boil for about three quarters of an hour. Then scum off the oil, which swims on the surface. From the  $2\frac{1}{2}$  sers of seed between 8 and 10 chhataks (1 ser=16 chhataks) of oil are procured. It is evident, that such a process could not be used in any country where manual labour possessed value.

In the southern part of the district is cultivated a good deal of the species of *Bhuphtalmum*, which in

Mysore is called Ramtil, and here Surguiya. The people of this district mix it with the oil of cruciform plants, and eat it, but the people on the banks of the Ganges hold it in abhorrence.

Having thus detailed all the articles cultivated, I should make some remarks on circumstances that are common to all, but almost the whole of what I have said in my account of Puraniya on this subject is applicable to this district. In Kalikapur only it must be observed, as I have before stated, that the reapers carefully lay down their rice, and cut it close by the root. The reason of the latter operation seems to be that much of the straw is there used for thatch.

The rates for harvest vary as in Puraniya ; but in general towards the west are not quite so high, and nominally are often so low as the sixteenth bundle, and sometimes as the twentieth ; but the bundle which the reaper takes, is much larger than the 15 or 19 which the farmer gets, which perhaps makes the former about equal to  $\frac{1}{3}$  or  $\frac{1}{4}$  and the latter to  $\frac{1}{2}$  of the whole, where the master thrashes. The lara or gleaning is also carried to a greater extent, and I saw some fields cutting, where at least  $\frac{1}{4}$  of the grain was left. This is not however all loss to the master ; as in many parts the gleaners give him a share. The reason of this seems to be, that the lands have often been assessed by a certain portion of the neat produce ; and this gleaning was a combination between the farmer and gleaner, in order to defraud the landlord. In the eastern part of the district the harvest is reckoned equal to  $\frac{1}{3}$  of the crop ; but this is mostly a nominal charge, a great part being reaped by the owners, or by servants hired by the year. The whole grain is here trodden out by oxen.

The granaries of unbaked clay (kuthi) are in universal use ; in some of the eastern parts, however, grain is kept in a kind of large basket, made of straw which stands in the house like the granaries of unbaked clay but is vastly inferior, as being exceedingly liable to catch fire.

In most parts of the district, on account of the white ants (*termes*), grain cannot be kept in pits ; but in the low inundated lands, where these destructive insects cannot

harbour, the pits are used in the dry season, and in the southern corner of the district also, I heard of their being employed.

## PART 4TH.

### PROFITS ON THE CULTIVATION OF GRAIN.

The remarks that I have made on this subject in my account of Dinajpur, as explained in treating of Puraniya, are entirely applicable to this district, only that if the expense of harvest be rather smaller than in Puraniya, every other operation is more expensive, and the high castes, who rent a very large proportion of the land, except towards Murshedabad, have no such privileges but, except what they procure by fraud or corruption, pay as much rent as the lowest. It is here usually alleged that the ploughman does no other work but plough and sow, and that persons are always hired to transplant, weed, reap and tend the cattle, and this may be the case with wealthy men, who keep three or four yoke of cattle for each plough, and have large farms. Accordingly such people swell out accompts of various charges, that run up to almost the whole value of the produce which they are willing to admit, because a custom has prevailed of levying the rent by a certain share of what is called the produce, that is of the crop after deducting certain charges, in which the landlord is always defrauded. But, as I have said, many men live in a manner that is here considered comfortable, who have no resource but the cultivation of grain, who do no work with their own hands, and who pay a rent for the whole land that they occupy, which is of an extent upon which a farmer in Europe should scarcely live without personal labour, were the ground his own.

## SECTION 2ND.

### *Plants cultivated as vegetables for the table*

In the 13th Statistical Table it will be seen that I have estimated the land in kitchen gardens at 42,700 bigahs, and that about 5565 bigahs in the fields are

cultivated with vegetables for the table, and besides, as in the account of Puraniya, I have here given under separate heads all such as are cultivated on so large a scale as to admit a particular estimate. The roofs of the huts are not here so generally covered as in Puraniya and the people have few arbours covered with twining plants.

In the whole course of my survey, I have as yet seen no gardeners so expert as those of Mungger. They are of the Koeri caste and possess some little stock. Formerly they were employed in cultivating the poppy, and took annually two crops from their land, one poppy, the other maize or maruya; but, the poppy having been prohibited, in its stead are reared wheat, baygan, *ricinus*, onions, garlic, and other vegetables. Each man has usually 4 or 5 bigahs (110 cubits square), or from about  $7\frac{1}{2}$  (7.562) to  $9\frac{1}{2}$  (9.453) bigahs, Calcutta measure, and he requires two stong cattle, which both plough and water the land; for in the dry season the whole is watered with a leather bag. A great deal of the labour is performed with the hoe, and his wife and children assist in weeding and gathering the produce. The gardeners pay a rent of from 7 to 9 rupees a bigah, and of course must be very industrious. The crops of wheat are exceedingly heavy, and certain. Of the 5 bighas, 3 for the first crop will be maize, 1 maruya, and 1 *ricinus* mixed with sem. Of the maize land  $1\frac{1}{2}$  bigah give as a second crop, wheat, 1 baygan, and  $\frac{1}{2}$  safflower, mixed with a few amaranths, or other greens. The maruya is succeeded by garlic, or onions, mixed with karela and radishes. The *sem* and *ricinus* occupy the whole year. The crops are every year changed; what land gave wheat and maize one year gives pulse and *ricinus*, or maruya and onions another. The produce of each bigah, customary measure, cannot be estimated at less than 20 a year. The soil is good, but not better than a very great part of what is now waste; and the wells are very deep, being from 25 to 30 cubits, as is usual near the great river. This shows what might be done. It is true, that in the interior there would be little sale for the vegetables; but a bigah of this size cultivated with grain, and with the same pains, would no doubt produce to the value of 12 or 14 rs.

## PART 1ST.

## OF PLANTS USED AS WARM SEASONING.

Ginger is here reared only for the consumption of the country, and is commonly planted in mango groves, shade being favourable for the growth of most plants of the scitamineous order. The plant here also is hairy. It is called merely Adi. Turmeric is only reared for the consumption of the country, and not in a quantity sufficient for the demand.

Capsicum is seldom cultivated in large fields, but small plots are common. At Munger are three kinds ; the most common is the Churiya or *annuum* ; the next in frequency is the *frutescens*, called Marich by way of excellence ; the most rare is the Bhahachiya, or *grossum* of botanists.

At Munger are reckoned two kinds of onion, the bhagalpuri and patniya, the former little, and the latter large. I have not seen either in a state fit for botanical examination, but presume that they are the same with the Chhoto and Boro Pajes of Ronggopur. Both are cultivated in two manners. One is by sowing the seed, and transplanting the young onions ; such are called Dhemra. The other method is by dividing the root into slips, which may be done at all seasons. Such onions are called Saga, or Sachi. Many onions are sent to Catcutta.

The same is the case with garlic.

Methi, or fenugreek is cultivated not only in gardens, but in separate fields.

In this district I observed the following carminative seeds. Of the Ajoyan, or *Ammi indicum* of Rumphius considerable quantities are sown on the muddy banks of the rivers, as the inundation retires.

The Channani of the farmers is the same with the Randhuni of Ronggopur, and is cultivated in fields ; but the druggists sell the sweet fennel by the name of Channani.

Dhaniya, or Coriander is common.

The Saongp, or anise, is also common.

The Jira is confined to the very borders of Gaya, nor did I see it growing. The seed resembles that of cummin, or perhaps is the same.

## PART 2ND.

## OF THE PLANTS CULTIVATED AS TARKARI.

In this district as in Puraniya the people give a preference to the more leafy plants. Those of a more succulent nature that are in use are as follows.

The most common Baygan, at Mungger, is called Golbhanta. It has prickles, and is therefore a kind of the *Solanum Insanum*. It is shaped like a pear, and may usually weigh about half a pound. This is the Golta of Puraniya.

Next to this is the Chengga, which has a cylindrical black fruit, and prickles on the leaves. This is the Baramasiya of Puraniya.

The Baramasiya of this district, has a fruit shaped like a horn, polygamous flowers, and no prickles. It is therefore a *Solanum Melongena*. Its fruit is greenish, or dark red.

The species which in European hothouses is often called the egg plant, from the resemblance of its fruit to the egg of a common fowl, is pretty common, but has no peculiar name.

The European potato *Solanum* has come into very general use at Mungger and Bhagalpur, and at both places considerable fields are raised, and the roots are preserved throughout the year. They are not so large as those of Patna; but some are sent to Calcutta, and to several intermediate places. The cultivation has only for a very few years extended to the natives; and they never are used as the staple article of food; they serve only when fried in oil, salt, and capsicum, as a seasoning for grain. They are called Gol Alu.

The Shukurkund Alu or *Convolvulus Batatas* is commonly reared in gardens; but in this district no extensive fields are occupied with this root, which here seems to be giving way to the potato most common in Europe.

The Doscoreas or yams are not of such variety as in Puraniya. Tha Suthni is the most common and is reared in fields as in Puraniya.

The other kinds are most commonly planted, so far as I saw, in mango groves, and were all these filled

with these excellent roots, much good nutriment, both for man and beast, might be procured, but except as a seasoning for grain they are totally rejected, and the demand is therefore trifling. There are said to be two kinds, the Ratuya and Khamba. Whether or not the former is the same with the one so named in Puraniya, I have not been able to ascertain, but the Khamba of the two districts are totally different, and that of Munger seems to be the same with the Sani Alu of Ronggopur, but the latter is a spontaneous plant, while that of Munger is cultivated.

The Arums or Calladiums are in general much neglected, but in some places there are a good many fields.

What at Munger is called Pekchi, seems to be a smaller variety of the Komorhog of Ronggopur. The bulbs are small, many adhering in a cluster to a bunch of stems, and are ripe from August to October.

The Aruya of this district which is the most common, seems to be different from that so named at Nathpur, and is the Mukhi of Dinajpur. Cuttings of the root are planted about the end of January, and are watered once in four days, until the rains commence. Many shoots spring up close to the parent, and under these many proliferous bulbs are formed, larger than those of the Pekchi, although the plant is much smaller. They are fit for use about the end of September, and weigh from 1 to  $1\frac{1}{2}$  lbs. each. They are dug, when ripe, and keep for about three months. The petioles or leaf stems are seldom used. It is said, that a bigah will give 50 mans of root, worth 8 anas a man, which is at the rate of about  $27\frac{3}{4}$  mans, worth  $13\frac{1}{4}$  rupees, from the Bigah, Calcutta weight and measure, or at the rate of 6842 lbs. worth  $39\frac{1}{2}$  rupees an acre. The ground is manured with cowdung and ashes.

The Ol *Tacca sativa* of Rumphius, is raised in small quantities, in corners about the houses, as the man is about Calcutta; but so little pains are bestowed on it, that the root always retains a considerable acrimony. It is said to be good only on a black free soil, which in this district is not common. The country, where it is most cultivated, would appear to be Katak.

The Man and sola are reared only in the Eastern extremity of the district.

Radishes are not near so common as in Dinajpur, but in most parts of the district many small plots are to be found. They are all of the red kind.

The carrot is cultivated in fields, is much eaten by the people, and what can be spared is given to cattle. If watered two or three times in the season, the carrot will give 100 mans a bigah, Munger measure and weight, or double the produce of the Arum above stated. The value, by wholesale, is about 8 R. at the rate of 2R. for 100 heaps, of about 10 sers each; but this land gives another crop in the year, that which is cultivated with the Aruya produces nothing else. Other statements, not likely to be exaggerated, make the produce  $\frac{1}{2}$  more, or 600 heaps a bigah. The carrots are ripe about the end of January, and will keep throughout the spring, just when fodder is scarce.

Plantains are very scarce and very bad.

The Jhingga of Ronggopur in the western parts of this district is called Jhingli and Torai and is much used from the middle of July to the middle of September.

The Pore brought to me at Bhagalpur was the species of Luffa that was called Ghira in Puraniya, but the gardeners of Munger know no such plant as Pore, and the Ghira of Puraniya was brought to me by a physician of Munger as the Parwal of the vulgar medical dialect, but the Polwol or the Porwal of Bengal is a species of *Trichosanthes*, which is not cultivated at Munger, but is found wild.

There is in the gardens of Munger a cucurbitaceous fruit called Nenuya and Paror, which, so far as I can observe, differs only in the smoothness of the stems from the Dhondul of Ronggopur. It is much used in the rainy season.

The species of Luffa called Satpatiya in Puraniya, is known here by the same name, and in the rainy season is a common vegetable.

The Urchhe of Ronggopur is the Kareli of Munger, and during the heats of spring is much cultivated on the sandy banks of the Ganges.

The Korla of Dinajpur and Ronggopur is the Karella of this district, being considered as the male of the last mentioned plant, not from any idea of the sexual nature of plants, but because the fruit is larger. It is cultivated in the same manner and is still more used.

The Kangkrol of Ronggopur is at Mungger called Kangkori, but is very little used.

The Kumra of Ronggopur, in this district as well as in Puraniya, is called Konghara. It is not much used.

The Pumpkin at Mungger, as well as in Puraniya, is called Kadima and Surajkanghara, and is in general use. In the eastern parts it is called Velati kumra.

The Gourd is here most commonly called Kaddu, but the original name seems to be Lauka. It is much used and is reared in fields as well as on the roofs of huts, but on these last it is not so common as towards the N. E. The young stems or shoots are often used as a succulent vegetable.

The Chichingga of Dinajpur and Ronggopur at Mungger is called Kaita, but in many parts it is known by the Bengalese name, and is more used here than in that country.

The Sim of Ronggopur is here called by the same name and near Mungger is cultivated in the fields. Both white and red flowered kinds are sown, and there are many varieties of each.

The Bar-Sema is probably the same with the Par-bartiya Sim of Puraniya, but I did not see it.

The Lobiya of Ronggopur, at Mungger is called Raksa-bora, and in the corners of gardens is cultivated in small quantities.

In the villages scattered through the woods of Bangka and Lakardewani, two kinds of Dolichos, called Kursa, are reared about the hedges, and their beans are used as Tarkari.

The smaller or Chhota-Kursa has at least a great resemblance to the *Dolichos pruriens* and the hair on its fruit produces the most violent itching; but it differs in so many particulars from the *Cacara pruritus* of Rumph (vol. 5, page 393), and the Nai corana of Rheede (vol. 8 page 61), that I consider it as a distinct species.

The Kursa, although exceedingly like the other, differs in the hair of the fruit, which is soft, and excites no itching. Neither species is worth cultivating, the beans being very indifferent. Rheede attributes invigorating powers to those of his plant, and it is probably some such idle notion that induces the people here to use so wretched a vegetable.

The Ram-torai or *Hibiscus esculentus* is more used here than towards the east, and is a good vegetable.

The stems of some of the Amaranthi are used as Tarkari, but their principal use being for their leaves, they shall be described under the head of Bhaji or greens.

### PART 3RD.

#### OF THE PLANTS CULTIVATED AS GREENS.

The Amaranthi are by far the most common, and at Mungger are reckoned the following kinds.

The Chaonglai or Gengdhari is in most use and is the Gendhari of Puraniya or *Blitum terrestre* of Rumphius. It is in season throughout the whole year. In a wild state it is very common, but the quality of this is inferior to what is cultivated.

The Dahariya of Mungger, so far as I can judge from having seen young plants, is the same with what in the S. E. part of Puraniya is called Rarhi-ponka. At Bhagalpur this last plant was brought to me as the Lalsak, because its stems are red, and my native assistants seemed to think that the Dahariya was the Deng-guya of Ronggopur or *Blitum Amboinicum* of Rumphius.

The Chhuriya of Mungger seems to be the *Blitum indicum album* of Rumphius. called by the same name in Puraniya.

I have already mentioned Lal or red Amaranth, but at Mungger this name is given to the *Blitum rubrum* of Rumphius, the juice of which when boiled is red. The people of Mungger call also this kind Kalkatiya Sak, having probably first procured it from Calcutta, and it has not yet come into common use.

Spinach at Mungger is called Palki. It is not much used because it will only grow in the dry season.

The *Basella* is called Poyi and is more used than the spinach, almost every poor person having a plant or two about his hut. A kind with large leaves is called Dhakar-poyi.

The Chenopodiums are a good deal used, and there are several kinds, which I have not yet been able to distinguish. They grow only in the cold season and are called Bathuya and Chandan-bathuya.

The Gulpha is the Purslane and its leaves are often used as a green.

Fenugreek is also used in the cold season.

The Fennel leaves are called Soya, and are sometimes used as a green.

The *Corchorus Capsularis* by the gardeners of Mungger is called Mithuya, but by the physicians it is called Narcha. It is sometimes, but not often, used as a green.

The Piring or *Trigonella corniculata* is very seldom, but sometimes, used.

In travelling through the district, the *Brassica eruca* B. of the Encyclopedie was brought to me as the Chiramira, and said to be used as a green, but the people of Mungger apply this name to an *Impatiens* reared as a flower.

The leaves of the Kusum or *Carthamus* are used as a green, but it is chiefly cultivated on account of its flowers.

#### PART 4TH.

##### OF PLANTS USED AS AN ACID SEASONING.

These are still less used than in Puraniya, and mangoes are almost the only thing in request.

The leaves of the Chandana *Hibiscus cannabinus*, which is cultivated for making ropes, are occasionally employed.

The only plant that properly comes under this head is the kind of Sorel mentioned in the accounts of the districts formerly surveyed, and here called Chukka.

The *Carissa Carandas* is here used as in Puraniya, and is called by the same name.

The Europeans have paid some more attention to their gardens than in Puraniya; but they are still very

backward in their fruits. I have already mentioned most of the fruit trees that have been introduced. Mr. Christian, of Mungger has figs, and several gentlemen have grapes, which are tolerably good; but both the figs and peaches would require shelter from the rain, by giving them a western or southern exposure, from whence rain seldom comes, and by placing them against a wall covered by an arch. The common European vegetables thrive well enough during the dry season; but asparagus has made little way; and it is the only one that grows during the rainy season. Artichokes are in abundance, and continue all the heats of spring. It seems extraordinary that this plant, which thrives uncommonly in the very cold and moist climate of the highlands of Scotland, should in India prefer the most sultry and arid seasons and places. In Bengal proper, it can scarcely be brought to produce.

The fruits reared by the natives are very much the same with those of Puraniya, and equally neglected, so that I have no occasion to repeat what has been said on that head. The only additions, that I have to make, are respecting those of the cucurbitaceous kind, which near the Ganges are much cultivated.

The water melons (Tarbij) are very good.

The best kind of melon is here called Kharbuja, and seems to me to be the *cucumis Dudaim* of Willdenow. It is depressed at the poles, and its smell is very fine, but it is insipid, and very poor eating.

The Phuti Kangkari or Dam, differs from the plant so called at Puraniya in the shape of its fruit, which instead of being oval is cylindrical, and it is often two feet long, by a diameter of from four to six inches. It has an agreeable smell, but is still more insipid than the Kharbuja.

The Mithuya Kangkri of Mungger is, I suspect, the *Cucumis flexuosus* of Willdenow; but differs very little from the two above plants, except that its fruit has little or no smell, and in place of being cylindrical, or depressed, tapers to a point. Although its native name would seem to imply its being sweet, the fruit is exceedingly insipid,

The common cucumber is very abundant, and tolerably good. Boiled or stewed it is one of the best vegetables that the country produces.

Some of those, who make garlands near the towns keep small plots, where they rear flowers for sale and a few rich men have small flower gardens, but I did not see one in the district that was worthy of notice; still, however, rather more attention is paid to this ornament than in Puraniya.

The only plants cultivated as medicines to any extent are the *Nigella sativa*, and common cress.

The former, it must be observed, in the dialect of Magadha, is called Mangrela, while the name Kalajiri, by which it is known in Puraniya, is in this district given to the *Conyza anthelmintica* of botanists, the Sungraj, of Bengal.

In the gardens besides the cress, which is by far the most common, there are raised the following medicinal herbs.

Harbhanga or Harjora, *Cissus quadrangularis*.

Beda, a species of Zinziber, mentioned in my account of Puraniya.

Karihaldi, another species of Zinziber, mentioned in the same account.

Kachur, a third species, mentioned in my account of Puraniya.

Amba-adi, a fourth kind, the root of which has a flavour of the mango.

Gahakaran, a scitamineous plant.

Israulgad, an *Aristolochia*, which seems to be the *indica*; but differs in some few points from the accounts given of that plant.

Isaddaula, *Euphorium Tithymaloides*.

Sudarsan, perhaps the *Radix toxicaria* of Rumphius (VI. tab. 69), a species of *Amaryllis*.

Chita, the *Plumbago zeylanica*.

Dhanattar, lemon grass, which, I believe, has never been known to flower, and cannot therefore be referred to any botanical system.

Barbari and Nazbo, the two kinds of *Ocynum* mentioned in my account of Puraniya.

## SECTION 3RD.

*Of plants cultivated for making thread or ropes.*

In this district there are of little importance, and exclusive of the lands belonging to the hill tribes, amount to only about 18,000 bighas, most of which during the year produce also other crops, as will be seen from the tables of produce.

The *Corchorus*, so far as I can learn in the Bengalese language is called Pat and Nalita and in the Hindi Patuya, Narcha, Kechuya and Meghnal, but these words are so variously pronounced that my native assistants, taking them down from various people, wrote them in 20 different manners. They talk of a Tita and Mithuya or bitter and sweet kind, one used for greens and another for making ropes; and there are commonly cultivated two very distinct species, the *olitorius* and *capsularis*; but I know that in different places the people use sometimes the one and sometimes the other for the same purpose. Owing to this confusion, I cannot say which of the kinds is used in each division. The whole quantity, when compared with what is reared in the Northern parts of Bengal, is trifling.

The *Crotalaria juncea*, called Son in Bengal, in this district is called Kasmiri, and is reared in small plots by the fishermen for making their nets, and is applied to no other use.

The Chandana, Amliya or Kudrum, of this district is the *Hibiscus cannabinus* of botanists, is cultivated nearly in the same quantity as the *Corchorus*, and the crop generally occupies the ground for a whole year. I have nothing to add to the account formerly given of this plant, except that the natives reckon its ropes stronger and more durable than those of the *Corchorus*; but they are still harsher, and its fibres cannot be reduced to fine thread.

Cotton in this district is by far the most important of these crops, and the interior is very much fitted for its cultivation, so that at least none needed to be imported; but although 12,000 bigahs are said to be cultivated on the plains, besides a very considerable quantity on the hills belonging to the northern tribe of mountaineers,

much is still imported. The kinds reared are called Bara bangga, Rarhiya, Bhujaru, Gajar, Bhoga, Athiya and Kartika, the general name Bangga being annexed to each. A few plants of the Kukti, the wool of which has the colour of Nankeen cloth, are scattered thinly through the fields of the Gajar. I have not been able to trace most of these kinds through their stages of growth, so as to ascertain with sufficient accuracy their botanical affinities. The only one indeed, which I have been able to examine, is the Gajar, which differs in nothing essential from the *Gossipium* of Rumphius (vol. 4, plate 12), which in Puraniya is called Bhadai; but the season of its growth, and manner of cultivation are totally different. It is sown about the end of June, ripens about the end of April, and is then cut; but for two years springs from the roots, giving a crop annually at the same season. For the manner of cultivation, and value of produce, I must in general refer to the tables.

#### SECTION 4TH.

##### *Of plants cultivated for saccharine juice*

Besides the palms and the Mahuya tree already mentioned, the only article under the head is the sugar-cane. It is chiefly cultivated near the banks of the mountain rivers, where it can be supplied with water by means of canals, and in the vicinity of Rajmahal, where it grows with more luxuriance than I have anywhere else observed. In the interior it is not so rich, but still is tolerably good, and is cultivated with some care. The lands there are level and rich, and under constant crop, much as in Ronggopur and Dinajpur: but in Rajmahal they are swelling, and rather stiff, but the field generally, although not always, is allowed a year's rest between the crops. In the former places the produce usually stated was about  $5\frac{1}{2}$  mans a bigah (Calcutta weight and measure) of the extract; but this is ridiculous; for although the natives stated that the greater part of their cane is of the small kind like a reed (Nargori), I saw none such; and my assistants recollect very little. I do not think, therefore, that less than 10 mans of the thinner extract (Rab) can be allowed for the bigah. Very little of the cake extract

is made. There is here a greater variety of kinds than in any of the districts hitherto surveyed. Of the Kajli, Khagri, and Nargori, I have already had occasion to treat. The Kajli is by far the best, and is confined to the vicinity of Rajmahal; but the Mango of other places seems to me to be the same, and is chiefly used for eating without preparation, and much is consumed in that manner. The Paungdi and Paungda are tolerably large yellow canes, and one of them at least would appear to be the same with the Bangsa of Puranya; but both agree with what I was able to notice concerning it. The Keruya is a poor small cane.

#### SECTION 5TH.

##### *Plants used for smoking and chewing.*

In this district these are of very little importance.

The tobacco is not adequate to supply the demand of the country, although in most places it seems to thrive. It is on the north side of the Ganges alone that it is cultivated to any extent. That which produces the largest and mildest leaf is called Mandhata or Dhamakul; the smaller and most narcotic is called Desla or Thariya.

Betel leaf is here a trifling article, but sells very high. The cultivators live very easily. The hemp reared for intoxication occupies only 13 bigahs that are avowed; but as I have said in my account of Puraniya, a few plants are in many places reared in hidden corners. The people here only allow 2 mans a bigah, but not the smallest reliance can be placed on what they say. I neither saw, nor heard of any poppy, although a considerable quantity was formerly reared.

Catechu, Ajoyan, Saongp and Dhaniya are also chewed, and are the produce of the country, but have been already mentioned. There are no betel-nut palms.

#### SECTION 6TH.

##### *Plants used for dyeing.*

Indigo, as usual is by far the most important, but on this subject I have met with no assistance from the gentlemen employed in that line. The factories are all situated near the river and are only 32 in number, but

I believe are in general rather thriving. Some of them, however are very small. In the Eastern corner two natives have lately erected factories, and, so far as the buildings are concerned, seem to have spared no necessary expense, but it was said that their crops have hitherto entirely failed. In that part of the country little seed is preserved, but towards the west a great deal is procured and exported, and for some years the rearing seed has been a very profitable concern, but I am told that, like every other part of the business, this also is extremely precarious, and that in some years the seed is not saleable, while in others very little is procured.

In my calculations I have been under the necessity of relying entirely on the information of the natives, who state that in all about 91,000 bigahs are in actual cultivation, of which about 88,000 produce weed and 3000 produce only seed; but much produces both, as will appear from the Tables. I am inclined to think that this may not be very far from truth, for the 17 factories near Gaur, according to the calculation founded on the reports of Mr. Ellerton, required about 66 or 67 thousand bigahs, Calcutta measure, actually sown, but these factories, on the whole, are considerably larger than those of this district, averaging above seven pair of vats each. The farmers, as usual, make the average produce higher than the planters because, as I have said, they judge by the number of bigahs which they cut, while the planter reckons by the number for which he makes advances. The farmers here allow from 20 to 30 bundles as the average produce of a bigah, Calcutta measure, and the total bundles reared to be about 19,00,000. The price given by the planters varies from 12 to 20 bundles for the rupee, but the lower rates are for 2d or 3d cuttings, where the weed is very short. The prices, however, are too low and by no means an adequate reward to the farmer; and the same complaints exist against the planters as elsewhere. But on this subject I have already had sufficient occasion to dwell, nor have I seen any reason to alter what I have said on the subject. The situation of Gondwara resembling that of this district more than

that of Gaur, we may take the average produce of Mr. Smith's factories, as stated in my account of Puraniya, for the produce of Indigo, and 19,00,000 bundles at that rate ( 257 bundles for the man ) will give about 7000 mans for the total produce of this district. The value and quantity of seed will appear from the Tables of produce. I am inclined to think that this produce is considerably above the real amount.

A great deal is sown intermixed with other crops as will appear from the Statistical tables but I have not been able to learn the details or advantages of each kind of cultivation. Mr. Christian has tried to water some throughout the spring and thinks that it answers.

The same planter cultivates a great deal with his own ploughs, although his fields are scattered in the usual manner, but his industry and care are uncommon ; otherwise this could not answer, although, as I have said were all the lands contiguous to the factory, this would be undoubtedly the best plan, and even under all disadvantages, Mr. Christian says that he has found it highly profitable. He indeed cultivates grain in the same manner and says that he has found it a very profitable concern.

Safflower, the Kusum of the natives, is of more importance here than in Puraniya, but the observations made in my account of that district are entirely applicable to this and suffice for the subject. I shall only here notice that a little is cultivated by itself, which enables us to judge of the value, which will be seen in the Tables. I must also add that the seed is here often sold, so that its value has been ascertained and therefore entered into the Tables, instead of the value of the oil, as was done in the Tables respecting Puraniya.

#### SECTION 7TH.

##### *Of Plants used for rearing Insects.*

In the part of the district which belonged to the province of Bengal many Jujub trees are preserved for rearing the lac insect, and are managed exactly as described in my account of Puraniya. The number of trees stated was between 17 and 18 thousand, and the produce about 1500 mans, as sold by the farmers but when

fully dried, it is reduced about  $\frac{2}{3}$  or to about 1000 mans. The price in different years varies extremely from 2 to 10 rupees a man, as sold by the farmers, but for some years has been high. The trees, according to their quality, pay from 1 to  $\frac{1}{4}$  ana of rent, so that 100 trees pay about  $3\frac{1}{2}$  Rupees.

In the forests again, some lac, is procured, partly reared with a little pains, and partly a production perfectly spontaneous. This ought, in strictness of method, to have been included among the natural productions, but I thought it best to bring the whole under one head, especially as the quantity thus reared is trifling, at least to judge from the report of the natives, on which, however, very little reliance is to be placed, especially as this year a gentleman of Bhagalpur began to make advances. Formerly a trifling quantity was used by the dyers of Bhagalpur, but the great demand in the Behar part of the district was for making bracelets, and the people had so little economy that they used that from which the colour had not been extracted. By the natives the price advanced was stated to me at 5 R. a man in Mallepur, the ser being 98 S. W. and Tarapur 88 S. W. When I visited Bangka the advances had not been made, and I understood that the whole sum advanced in the two former districts was only 900 R. Probably there might be to three or four times that amount in Bangka, where most of the Lac is reared. This trifling sum, advanced at no higher than the usual price, raised the retail price to 16 R. a man but of course this could only last for a short time. It soon fell to 10 R., while 8 is the common rate. In a few years, if the advances are continued, and increased to any extent, the price will return to its usual and proper level, as there can be no bounds to the quantity procurable. In Tarapur, before this year, none was ever reared, nor have the people of Mallepur yet begun to apply a twig loaded with the insect, to fresh trees, all the trouble which rearing Lac requires. They content themselves with what they accidentally find in the woods, on the trees called Kusum (No. [blank]), Palas (No. 133), Pipal (No. 162) and Bayer (No. 114). That found on the 1st is reckoned the best; that found on the two last is thought the worst. This difference, however,

in all probability is imaginary, for the people of Bangka, who are at the trouble of rearing it, prefer the Palas tree to all others, although they occasionally apply the insect to the Bayer and Pipal above-mentioned, and to the Pakar (No. 163) and Dumri (No. [blank]), and even to a large climbing plant named Lat-parasi, which I have mentioned among the plants applied to various purposes (No. 7). The number of people employed in Bangka, I was told, amounts to 500, and these pretended that each could not collect above 20 or 25 sers of 80 S. W., for which they received a little rice and salt, and paid from 4 to 8 anas to the landlord for their trees, which are a fixed property, and are managed exactly like the Bayer trees of the eastern part of the district ; but the traders, even before the advances, acknowledged an exportation of 600 mans, and although this is probably much underrated, it gives 48 sers for each collector, or double of what they stated, so that no attention need be given to what such people say. At Tarapur, before the advances, they acknowledged the exportation of 200 mans. At Mallepur no more than enough to serve for ornaments was collected; but 800 mans seem too little for the consumption of the remaining divisions in the Behar part of this district, and the produce probably, before the advance, might be about 1800 mans.

The only important article belonging to this class, that is at present reared, is mulberry, which is confined to the eastern part of the district, and is cultivated on account of the Company's factories at Junggipur and English Bazar. A considerable part of it is in the detached portion of Furrokhabad that is situated near Gaur, and is very rich. The remainder is in lands that are rather low and managed nearly as those in Sibgunj of Puraniya. I shall take the produce at the same rates that I did in the similar situations in Puraniya, having had no opportunity of forming a more accurate calculation. I must only observe that here also the average accounts of the cultivators fell as much short of Mr. Ellerton's statements as those of the Puraniya people. The quantity of rich land being 350 bigahs and of a poorer kind being 2150, the value of the leaves will be about 31000 R. and the cocoons will amount to about

8000 mans, worth 100,000 R. Supposing that the Company's factories take one half of these of the best quality, the remainder, spun by the natives, will give about 54,000 R. worth of silk or 7200 sers.

In my account of the natural productions I have said all that occurred to me concerning the Tasar silk.

In this district no plants are cultivated for making mats, if we except the palms already described.

Further, all that I have to offer concerning the cultivation of plants intended for feeding cattle, has been anticipated in my account of the Arum called Aruya, and of the carrot, the latter of which deserves the utmost attention.

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## CHAPTER 2ND.

### OF THE IMPLEMENTS OF AGRICULTURE

The plough does not differ materially from those of the district already described ; but it is always provided with a little bit of iron. To draw the plough scarcely any cows, but a few buffaloes are employed. The other observations made on this implement and its management, in my account of Puraniya, are entirely applicable to the ploughmen of Bhagalpur.

I have before observed that wheat and barley are usually sown in drills, and the drill called Chongga is an instrument like the Sudiky described in my account of Mysore. It consists of a bamboo, having at its top a wooden cup into which a man drops the seed. The bamboo is tied to the beam of a plough, and its lower end passes through the body of the plough, just behind the iron, so that the seed falls into the furrow, and is covered by the next.

In the eastern parts of the district the Mayi is used ; but in the western, as in Puraniya, its place is supplied by the beam or plank called Chauki. In order to save the skin ropes many farmers here use for dragging it an iron chain fastened to a hook, and they have had sufficient ingenuity when it is dragged by ropes made of hide, to use a hook driven into its upper side, and to this to fasten the rope.

Many farmers have the Bida or rake drawn by oxen, and it is usually provided with iron teeth, or at least the teeth are alternately of wood and iron ; but in many parts this implement is not used, and there is nothing to supply the want of the harrow.

The reaping hook is of two kinds ; the Hangsuya, which has no teeth, and is the larger of the two ; and the Kachiya, which has teeth, and is very small. The former is most

usually employed to cut grass; but in some parts they use for the latter purpose a large sickle called Jhapau, and the Hangsuya is used to cut corn (see Drawings No. 24 and 25).

There is nothing remarkable in the weeding iron (Khurpi), the hatchet (Kulhari), or the bill (Dao).

The hoe (Kodar) is of two kinds, differing chiefly in length of shaft; but not distinguished by appropriate names.

On the north side of the river every family has a large wooden pestle and mortar for beating rice, and the lever (Dhengki) is not in use; but on the southern side many families, even for their own consumption, use the latter instrument; and it is universally employed by those who beat for sale.

The sugar mill (Kolu), is of the same kind with the Kolgachh of Ronggopur. The iron boiler is however in general larger and the number of earthen pots through which the juice passes, before it comes into the boiler, where inspissation is completed is much smaller, seldom exceeding five. A set of work clear about five acres of cane in a year, and is usually made at the joint expense of from five to ten neighbours who may rear that quantity, and who unite their cattle and servants to clear the whole crop. The iron boiler is the only part of the apparatus at all valuable, and is often hired by the season.

A small cart called Saggar in the southern forests is in universal use, and is employed to bring home the harvest, to carry goods to market and to bring fire-wood. It is exactly on the plan of the Mysore cart, described in my account of that country, but vastly more rude, and consist of an axle-tree with two wheels made of three planks, joined together with wooden bolts and cut round, with a hole in the middle for the axle tree. The body consists of two sticks tied behind to the axle-tree and joined together before at the yoke. It is drawn by two cattle. Near the Rajmahal the farmers have a kind of waggon on four wheels, very nearly as rude as the above-mentioned cart; but it is chiefly used to bring firewood from the forests. The use of the small cart, however rude, is a great improvement, and should

put to shame the farmers on the bank of the Ganges, who flatter themselves with being more civilized than the people of the forests, and yet continue to carry home their harvest on their heads and shoulders.

The only other implements of agriculture are those employed in irrigating the fields, to which I proceed as a principal means of manuring the land.

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## CHAPTER 3RD.

### ON MANURES.

Notwithstanding the abundance of fuel, a great deal of the cow-dung is collected for burning; and except in Kalikapur, on the land called Rarh, I saw no such thing as a dunghill. When in other parts of the district it is wanted to enrich any land, it is done by collecting throughout the night a number of cattle on the field. No great pains are however bestowed on this for most of the cattle that are kept in Bathans, are not brought at night to the fields that are in the vicinity of the wastes where they feed, and their manure is totally lost. On the whole, however, the farmers are rather more attentive to this improvement than those of Purnaniya, especially on their sugar land, which is always manured, and the effects are very visible on the crops. Oilcake and fresh earth are given to betel-leaf, and the latter is given to the mulberry. Ashes in many places are neglected, in others they are given to winter crops. In the high rice land called Rarh, which constitute the cultivated parts of Kalikapur, the farmers collect cow-dung and ashes for that grain, and also manure it with mud from the bottoms of old tanks ; and their condition shows, that they find an ample reward for the little additional labour that they bestow. Manure is usually given to each field once in the two years. Wherever the land is inundated, and has received the mud of the Ganges (Reti), manure is considered as totally superfluous. Much more attention is paid to watering than in any of the district formerly surveyed. In the marshes of Rajmahal the spring rice is watered by the instrument like a canoe which has been described in my account of former districts, and in the Hindi dialect is called Karin, and on the banks of the Ganges the same crop is watered by the basket suspended from four ropes. This is also much used in the eastern parts of the

district for throwing the water out of numerous tanks or ponds that have been dug to give a supply to the rice fields in temporary scarcities of rain. According to differences in the size, shape and materials, this instrument takes various names, Seyuni, Don or Chari, and Toka or Dhama. The greatest part of the irrigation, however, is carried on in the interior of the southern portion of the country, approaching in its nature to Mysore, and the contrivances in the two countries are similar, but here vastly more imperfect, probably because the necessity is not nearly so great.

The canals from rivers are called Dhar, and are made and repaired entirely by the owners of the land, who appoint petty officers Suruya, Sarboha, Pangchanda or Borahi to distribute the water. These canals are usually from 1 to 3 coses long, and usually 4 or 5 cubits deep, and as much wide; but a few extend from 3 to 6 coses in length. Their principal use is to supply the rice fields during the rainy season, when there happens to be long intervals of fair weather, and during the month Kartik, when the rains have usually ceased. At this time the mountain torrents contain a stream, which is turned into the canals by temporary dams. In the rainy season the rivers are abundantly high to enter the mouths of the canals. The cost of digging these was stated to be  $2\frac{1}{4}$  Rs. for every 100 guz long, by 1 wide and 1 deep. The guz is  $33\frac{1}{2}$  inches, which is at the rate of 346 cubical feet of earth moved to a short distance for the rupee. Each farmer makes small dams across the canal in order to force the water upon his fields; and, when these have received their allowance, the dam is broken, and the water is permitted to run to the next man's possession.

The reservoirs are here called Bangdh, and are still more inferior to the grand works of the south of India than the above-mentioned ditches are to the Anacuts of the Caveri. No advantage has been taken of the hills and rising grounds to form between them large banks of durable materials sufficient to contain a great mass of water, which might supply a large tract through the whole dry season. The reservoir here is only intended to supply the fields in intervals of fair weather that

occasionally happen during the rainy season, and for the first month after these cease. The reservoirs are generally, in fact, very long banks, perhaps 3 or 4 feet high and as much wide, which run along the face of a sloping ground. During the rainy season the water from the upper part of the slope collects to perhaps 20 feet in width, and is let out by a hollow palmira stem (Dongga), when required to irrigate the lower part of the slope which is cultivated with rice. The upper part of the slope and the bed of the reservoir is either cultivated, or might be so, with crops that grow in winter. Sometimes the reservoir is made at the end of a canal, to receive any superfluous water, and preserve it until wanted, a very judicious plan, too much neglected in Mysore. These reservoirs also are in general made entirely by the Zemindars, but sometimes he pays only a half, and in others they are repaired by the tenants, but in such cases the rent is fixed and does not depend on a share of the crop. Much rice land has no assistance of either kind, and I saw some immediately under reservoirs that was fallow. It was said that the rains had failed so entirely, that even the reservoir had not ensured the crop; but others alleged that this was a mere pretext and that the lands were waste from mismanagement.

In the higher lands of the eastern part of the district, which are called Baghri, the principal supply of water in cases of a temporary deficiency of rain comes from tanks or ponds, which are exceedingly numerous. In the rainy season the water of these pounds, being higher than the level of the country, the bank is cut and it flows spontaneously over the fields; but when a supply is wanted in October, after the rains have ceased, the water requires to be raised by machinery, but only to the height of a few feet, and this is mostly done by the basket suspended by ropes.

These two methods of watering the soil are intended to supply deficiencies in the quantity of rain, but both in the interior of the southern parts and on the southern bank of the Ganges, especially near Mungger, a considerable quantity of land is watered to render it more productive of crops that grow in the dry season, especially sugar-cane, wheat, China and vegetables. In

the preceding account of gardens, I have mentioned the vast advantages that result from this mode of cultivation, which cannot be too much encouraged, not merely as enabling the farmer to rear a much greater quantity of grain and to pay a heavy rent, but as being less liable to suffer from variation of season.

The method used at Munger for raising the water is by a leathern bag, drawn by two oxen passing down a slope, with a rope passing over a pulley or roller.

This instrument is called a Mot, and differs from the Capily of Mysore in having no contrivance, by means of a leathern tube and double rope, for evacuating the bag, when it reaches the surface. Two men are therefore required for each Mot; one to manage the oxen, and one, who, when the bag reaches the surface, pushes it aside, and, placing it on a cistern, allows the water to run out by slackening the rope. He then as the cattle ascend the slope, throws the bag into the well. No time is lost in this operation, but an additional hand is required. The people here, however, give it a decided preference to the other plan, which in a few cases has been tried. I should have undoubtedly considered this as a mere prejudice, did not I observe in the *amœnitates exoticæ* that both methods were in constant use in Persia, and that Kämpfer, the most intelligent and accurate of travellers, agreed with the people of Munger in his opinion of the two instruments. I must confess that it appears highly improbable to me that any additional quantity of water raised by this means should compensate for the additional expense of one man's labour, and I have even some doubts concerning the more simple machine being able to raise more water, but without trying the matter by repeated experiments, it would be very rash to decide. I have, however, no doubt in recommending either method as the cheapest means of watering ground from wells, when the depth of these is considerable. The common depth at Munger is from 25 to 30 cubits, and some are still deeper, and yet bear the expense.

In the interior southern parts, all the wheat and sugar-cane are watered: but the implement used is a pot suspended from one end of a lever, like the Yatam or

Pacota of Madras, only very rude like the Jangt or Dab of the districts hitherto surveyed. Here it is called Kungri, and it answers very well whenever the water is near the surface, but from (*sic?* for) deep wells it is certainly inferior to the leathern bag. Accordingly, in the parts of which I am now treating, no cultivation of this kind is attempted, except on the level lands near the banks of rivers. There, in general, the water is found in wells at a very little depth or is still more easily procured by making little oblique cuts through the sandy channels of the rivers, which at their lower ends collect an abundant supply. When the rains are scanty and the rice fails this cultivation is a grand resource, and when I visited the country, had been pushed to a great length. In ordinary seasons it would ensure riches, for the greater part of the labour might be bestowed on sugar-cane, by far the most advantageous cultivation in Bengal, as the demand of the country secures a high price for much more than is now reared.

In some parts of the district, in place of suspending the plot to the end of a lever, it is lowered and drawn up by a rope passing over a roller, which turns round between two forks, but is not thicker than the arm, so as to afford very little increase of power. This implement is here called Jangt, the name which in Bengal is usually given to the pot suspended from the lever.

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## CHAPTER 4TH.

### OF FLOODS AND EMBANKMENTS.

There are no embankments for excluding floods of any considerable size, and the number of small ones even is altogether inconsiderable. In fact I heard of only one of the banks of the Gumanmardan, which is about 60 cubits long and 2 or 3 cubits high, and of a few on the creeks near Kahalgang that were still less considerable. In this district no banks have been erected to procure an equal distribution of the water, nor is the country in general adapted for this improvement. In the south-east part of the district, it is sometimes necessary in the begininng of the fair weather to make drains, in order to take the water from low parts, so as to admit of the plough for sowing the winter crops; and this practice might be extended with the utmost advantage to the part on the north side of the Ganges, where with a little pains I have no doubt most of the swamps might be rendered fit for crops of this nature.

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## CHAPTER 5TH.

### OF DOMESTIC ANIMALS.

In the account of the conditon of the people and in the 11th Table will be found an account of the tame elephants, camels and horses that are kept by the natives of this district as belonging to their personal equipage. Here many ponies are used for the carriage of goods, and their condition is exactly similar to that of the ponys of Puraniya ; but, although by no means better, they are higher priced. Their number, and that of all other kinds of cattle, will be seen in the 35th Table.

Throughout the Behar part of the district, asses are pretty generally diffused among the washermen. An ass sells from two to three rupees.

The stock of cattle of the cow kind in this district, when compared with Bengal, is of great value. Near the Ganges, on both sides of all the Behar part, the cattle are fully as good as those of the best part of Puraniya. In the parts belonging to Bengal they are inferior; but are not so small as in Dinajpur or Ronggopur. In the forest districts they are of an intermediate quality, and seem to have been rapidly improving ; for Captain Browne, in his account of that part, speaks of the cattle as being uncommonly small, which at present is by no means the case. An improvement, indeed, might be naturally expected; as since the abolition of plunder, the best cattle from the banks of the Ganges frequent these forests, and by an intermixture of breeds will no doubt render both of the same value. The cattle kept by the tribes of mountaineers, and fed on the pastures at the roots of their hills, are said to be remarkably strong. They are used for carriage alone. Uncommon little pains are bestowed on the nourishment of the sacred beasts, and they are treated with the utmost severity in exacting their labour, but in other

respect great attention is bestowed on them. It is only in Lakardewani that some impure saungters have been permitted to work the cow, and a most violent opposition was at first made to such an atrocious innovation; but the obstinacy of the barbarians prevailed, chiefly, I believe, because they were thought powerful in witchcraft, and because, disputes with such people were considered as dangerous. This tenderness towards the cow no doubt has tended to improve the breed; but has been counteracted by a very great proportion of the labour being performed by bulls, nor did I hear anywhere of good prices being given for bulls reserved for breeding, the number of which is indeed small, nor is this compensated by many consecrated animals although these are not only more numerous in proportion than in any of the districts hitherto surveyed, but also more pampered and vigorous. The bulls that are wrought in the plough sell lower than even cows, and these sell a little lower than labouring oxen of the same size.

An estimate of the whole quantity of milk that the owners of the cows receive, and of its value, will be found in the 36th Table. In this Table I have not divided the cows into the three classes adopted in Ronggopur, because the number of cows fed in the house throughout the year is altogether inconsiderable and because most of the cows pass a great part of their time in the Bathan.

The pasture in this district, exclusive of that belonging to the hill tribes, consists of the following descriptions: 1st high land covered with reeds or coarse grass, 418 square miles; 2nd woods, 1468 square miles; 3d, 116 square miles in fallow; and 4th broken corners among cultivated lands, 229 miles. The grass in the two former is coarse, and in the first, during the dry season is almost entirely parched up, but in the woods the shade preserves a little moisture, so that in December the cattle are in tolerable condition, but even there in March, vegetation is almost at a stop. In the lands of the two last descriptions the herbage is much finer, but is quite burnt up, except during the rainy season, when it is very good and is a grand resource. I have not included the 362 square miles of hills, because large

cattle are never fed on them, as they are neglected, even for goats, of which they might rear very large flocks. Of the inundated land there are including broken corners, 117 square miles of clear pasture, and there are 585 square miles covered with reeds, bushes and trees, chiefly on the north side of the river. In the dry season, especially after the first showers of spring, these are much better pasture than the higher lands, and are then the chief resource, but in February and March the vegetation is everywhere very trifling and the condition of the cattle is extremely wretched. The supply in the rainy season is amply sufficient for many more cattle than are kept.

On the north side of the Ganges the Zemindars have long taken rent for the pasture of cows or oxen, but on the south side of the river the pasture for these animals was in general considered as free. Of late, however, the Kharakpur Raja has taken a trifling rent. In Kahalgang the whole pasture belongs to one man, who takes a small sum for each beast. This is a very bad practice, as he is interested to prevent cultivation and to encourage the trespasses of cattle, but this right has been erected into a Zemindary for which the owner pays 330 R. a year.

Where the country is well-cultivated, as about Bhagalpur and Mungger, although high, all the young cattle, all the cows that are not in full milk, and all the oxen that are not employed in labour are, during the rainy season, sent to the woods of the south, and during the dry, to the wastes of Gogri. The cattle necessary for labour and the cows in full milk are kept at home, and are fed on broken corners, where, in the rainy season, there is a strong vegetation, and it is then that most of the cultivation goes on. In spring the plough oxen are exceedingly wretched, although then both they and the milch cows get some fodder. In the woods the cattle of the villages interspersed live always at home, having near them a large range of pasture, but towards spring they are very wretched, as it is very rare that any fodder is preserved. In the inundated lands of the western parts, all the cattle that can be spared are, during the rainy season, sent to the woods of the south.

and the cows in full milk, which are kept at home, are fed on grass or reeds cut from the few high sports, that are above water. In the low lands, towards Murshedabad, where the country is very fully occupied, the people, by pains in cutting grass from fallow lands and broken corners, and by preserving fodder, contrive to keep almost the whole of their cattle at home during the whole year, and seem to derive fully as much benefit from this source as where there are vast tracts of waste pasture.

The quantity of fodder preserved might with care be much increased. It is regularly given to cattle only that are wrought in carts, and to milch cows of a few very rich men; but cattle which carry loads are always allowed fodder, when wrought; and in most parts a little is spared to the plough oxen when employed and to the cows in full milk during seasons when pasture is scanty. Except in the Bengalese part of the district, rice straw is considered as very bad fodder. The cattle are allowed indeed to eat it, after the ears have been cut, and these when the grains has been removed, are thrown out and greedily devoured, but they are not thought worth preserving. The stems of maize are given in the same manner during harvest, but are not kept. The fodder which here is considered as worth keeping consists of the straws of Wheat, Barley, But, Pease, Lentils, Khesari, Kulthi, and Urid. These are usually mixed, are broken into small fragments and compose what is called Bhusa. The giving these to cattle would in Bengal be considered as little short of insanity, and here the rice straw of Bengal or Madras, and the straw of the *Corocanus*, preferred in Mysore, are equally neglected. The pods of all leguminous plants, where the stems are too coarse, are added to the Bhusa, and also the integuments of all kinds of pulse removed when these are split. At Munger an ox loads, about 250 Ib, sells usually for 2 anas, and is reckoned a good allowance for 12 large oxen, each of which, if wrought in a cart, will besides require about 2 lb. of oilcake. On such food they will be in good condition and labour hard.

Salt is given to every beast on the Dewali festival, but in so small a quantity (1 Chhatak) that it can have little or no effect, even of a temporary nature.

The cattle, when not at home, lie out, even in the rainy season, although they are then in woods where materials are superabundant; small huts only are erected for the calves that are not able to follow their mothers. When at home the cattle are in general lodged in huts as good as those of the owner.

All the cattle in the Bathan are under the charge of persons of the Goyala tribe, who here seem to enjoy the exclusive privilege; but in the villages poor boys or old women of all tribes take care of the herds. The reward for both is fully as high as in Puraniya.

The remarks that I have made on the profit arising from the cattle of this kind in my account of Puraniya are entirely applicable to this district, only that in the western parts here milk is not quite so scarce as in the western parts of Puraniya, owing to less attention being paid to the breeding for sale, and accordingly, the people here will not allow that any are exported.

The cattle here are as healthy as in the west of Puraniya.

Buffaloes in this district also are an important, valuable and respectable property. They are not of greater value than those of the greater part of Puraniya, selling usually at from 20 to 32 R. a pair, according as they are of the two breeds, Bangri or Arni, the latter of which are the best, but least numerous. In Phutkipur a herd belonging to a great Zemindar was valued at 30 R. each, being remarkably fine. Many more buffaloes are fed in the district than belong to it, but these I shall not take into account, the trifle which they pay for pasture amounting to nothing worthy of being entered in a general estimate. A good many buffaloes are wrought in the cart and some in the plough. It seems extraordinary that in India the buffalo should be selected for these labours, more and more in proportion to the dryness of the climate and aridity of the soil, for it is an animal that delights in moisture and to wallow in the mud. Where the buffalo is wrought, a few males are reserved for the purpose; but barren females are in general sufficient to supply the demand of this district, which is not great. In the western parts of the district, very few are reserved for sacrifice, and the male calves, in order to procure the

whole milk, are usually destroyed or sold to the butcher when five or six days old ; but in the eastern parts many males are preserved for the altar.

In this district the buffaloes in general live entirely in the Bathan, and it is only rarely that a milkman keeps at home two or three that are in full milk. In the dry season they frequent the marshes of the north and east side of the district, and the tamarisks on the banks of the Ganges ; in the rainy season they retire to the woods of the south and always lie out. Their keepers live constantly in the situations that are just reckoned the most unhealthy, that is, in marshes drying up, or in woods filled with leaves rotting in the rain, and they have in general very little shelter, for they usually change their station once in five or six weeks, and the temporary sheds that they erect are to the last degree miserable. It is however said that they are less subject to sickness than the people who live in villages, and in particular are exempted from fevers ; it is to fluxes chiefly that they are subject.

The remarks which were made in my account of Puruniya on the profits of this stock are here equally applicable.

In this district goats are very numerous, and as I have before mentioned the number might be greatly increased by feeding them on the hills. There are two kinds. One is the long-legged goat, common in the south of India, and described in my account of Mysore under the name of Maykay. It is confined almost entirely to the town of Bhagalpur, where the convicts have about 500. This breed is here called Baghra or Yamunapari, that is from beyond the Yamuna river. A grown female sells for about 3 rupees, but the convicts will seldom part with any, reserving them for milk.

The common breed is the same with the goat usual in Bengal, that is, has short legs, smooth hair and a beard. Their management is the same as in the district already surveyed.

The sheep of this district are of the two kinds mentioned in my account of Puraniya and managed exactly in the same manner. I was there led to suppose that the hill of Kharakpur were the original country of the

long tailed sheep, but that is by no means the case. If they abound in the Vindhya mountains, it must be in the western parts of that country. The short tailed sheep, it must be observed, breeds twice a year, and has usually twins.

The swine are also in the same state as in Puraniya, increasing in number the farther you advance from the boundary of Bengal.

Curs and cats are exactly on the same footing as in Puraniya. On the northern side of the river are some greyhounds, which the natives use in the chase. They are not handsome dogs, but I am told are bolder than the common greyhound of Europe, and attack the wild boar.

Poultry, except at Munger, is very scarce. Geese are only kept as pets. There are no ducks, and fowls, although kept by some of the wilder tribes of Hindus, as well as by the Muhammedans, are very scarce. Pigeons even are difficult to be procured. At Munger a few turkeys and geese, and abundance of good fowls, some of them very large, may be procured, and what is more, may be procured tolerably fat and tender, a luxury not to be thought of in any of the district hitherto surveyed, nor in any other part of this. The Portuguese of Bhagalpur also rear a few turkeys and geese.

## CHAPTER 6TH.

### OF FENCES.

In this district I have observed no fences for securing the fields from the depredations of cattle, except in the woods, where the crops are often surrounded by dry thorns that are annually renewed. In the woods of Lakardewani some badly constructed railings are also used, chiefly by the sides of the lanes near the villages through which the cattle are quickly driven to pasture, so as to have no time to break down so imperfect a fence. Some gardeners are secured by ditches or quickest hedges, but many are quite open, as is usually the case with even the mulberry. The plants most usually chosen for the quickset hedges are the same that are used in Puruniya.

## CHAPTER 7TH.

### OF FARMS.

The high castes do not enjoy the same privileges as in Puraniya. In no part are they more exempted than others from paying rent for the ground occupied by their houses ; but in most parts of this district it is from few only that ground rent for houses is demanded, and it is only in some parts, chiefly in the portion of the district which belonged to Bengal, that they are allowed to occupy land at a lower rate than others. A certain part, however, of the military tribes hold land by military tenure either, free of rent, or for a mere trifle, and the lands of both such are most miserably neglected. But besides these a great deal of the land is rented by the high castes ; and a great deal of this is supposed to be at the same rate with what is paid by common cultivators ; but their rent is seldom levied with rigour, and the kinsmen of many of these farmers being employed in the management of the estates, various shifts have been invented to lighten their burthen. None of them work with their own hand, and it is not customary in this district, except just in its southern extremity, to relet land to under-tenants, neither are those who cultivate for a share numerous, so that most of the lands rented by the high castes are cultivated by their slaves or hired servants. The higher rent paid here makes them more industrious and attentive than in Puraniya, and their stock of cattle also is very large.\*

The next class of tenants as in Puraniya consists of the tradesmen and artists. Among these I have only included such of the Goyalas as deal in milk, for in this district a very great number of that caste does not deal in milk more than any other farmers. All that I have said in the account of Puraniya concerning this class of tenants is here also applicable, but I must add, that in this district a great many tradesmen work part of the year

in their art, and the remainder at their farm. Here a great part of the petty traders (Beparis) are included among the Paungniyas (or tradesmen).

The third class of tenants consists of Chasas or ploughmen; but this denomination of persons contains not only the tenantry who are willing to labour with their own hands, but servants, day-labourers, and slaves. In Kalikapur I saw some wealthy men of this class, like the great Muhammedan farmers of Dinajpur, and these also were of the same faith; but in general this class is very poor. Most of the more wealthy are petty dealers, and are distinguished from the petty dealers of commercial tribes by being called Grihastha-beparis, in place of Beparis.

The fourth class of tenants, mentioned in the account of Puraniya, and which consists of under-tenants, except in the southern parts of Lakardewani, contains in this district very few persons, who in the Hindi dialect used here are called Kurtali and Kolayit. These also are included among the ploughmen.✓

In Table No. 35 will be found an estimate of the proportion of live stock belonging to the high castes, to tradesmen, and to farmers: and in Table No. 37 will be found an estimate of the proportion of rent paid by the three first classes, and of the proportion of ploughs held by their owners, or men of their families, by those who cultivate for a share, by hired servants or slaves, and by under-tenants. This will explain many circumstances relative to the stock of farms, and will enable the intelligent reader to judge in what manner the burthens fall on each class of tenantry. I shall proceed now to explain somewhat farther the nature of the stock.

The expense of implements is next to nothing, so that, as in Puraniya, the only stock worth notice is plough cattle, and the observations made on these in my account of Puraniya apply equally in this district. The average amount for each division may be found by dividing the whole value of plough cattle, which will be found in the 35th Table, by the number of bigahs actually occupied, which will be found in the Tables from No. 14 to No. 33,

In the 38th Table will be found an estimate of the number of cattle allowed for each plough, and constructed

on the same principles with the 36th Table of the Puraniya district, and the remarks which I made in the account of that, concerning the quantity of labour performed by the cattle and expenses of cultivation will be found nearly to coincide with the state of this district ; a more accurate statement may, however, be procured of the former by comparing the number of plough cattle of each division, which will be found in the 35th Tables with the quantity of work which they perform, which may be readily extracted from the Tables explanatory of cultivation.

In many parts the tenant pays, nominally at least, one-half of the produce as a rent; but this is on valuable crops. The expense of cultivation however, even allowing for the frauds, to which the high castes are incident, cannot well exceed upon the whole, one half of the gross produce, and this was confirmed by many statements which I procured, and by the calculation founded on the custom of the servants called Athoyaras, which has been mentioned in the account of Puraniya, and in this district there are some such servants, although not so numerous as in the former. The cost of harvest is here in general smaller; but on the whole, even where the tenant does no work himself, every charge is, I am certain, defrayed by half of the gross produce; nor can the rent paid to the landlord amount to one half of the remainder.

There are fewer great or wealthy farmers than in Dinajpur, or at least they conceal their wealth so carefully, that it is unknown, and in fact becomes useless either to themselves or others. Owing, however, to the system of advances having made comparatively less progress, the people are not so much involved in debt and difficulty. In table No. 39 will be seen an estimate of those who pay their rent as it becomes due, from their own stock; of those who borrow ready money; of those who take advances for the purpose, but who at crop season complete their engagements; and of those who, having taken advances, are annually falling more and more in debt. Similar tables have not been formed for the districts hitherto surveyed, but in all of them, I am persuaded, it would have appeared that the first class

would have been less numerous, and the last class more predominant. Money, borrowed in small sums to pay rent, usually pays at the rate of 1/32 part per mensem. The arrears of rent due to landlords are a trifle

There has been no attempt to regulate the size of farms, which are nearly of the same size as in Dinajpur or Puraniya, but it is not so common a custom here as in the latter district, for poor farmers to unite stock, to enable them to complete what is requisite for a plough: each man, in by far the greater part of the district, has as much of his own, or borrows it.

Scarcely any of the landlords make advances to the tenants, and those who follow this practice, are chiefly confined to the eastern parts of the district, and it is given only to new comers. It would be more useful in the wastes, where poor men alone can be expected to come, and where new settlers are much required. The advances which are made are usually in the form of a loan for one year, at the rate of 2 anas interest on the rupee, or 12½ per cent.

The rents are much more equally assessed than in Puraniya; and in the same vicinity are in general somewhat in proportion to the value of the land, but in different parts vary astonishingly; and on this subject in particular, the utmost pains were taken to keep me in the dark. What I have learned on the subject shall be detailed in my account of particular estates. In general, however, it must be observed, that except in a few places, and on rice land, it is too low to act as a sufficient stimulus to industry; and it will be observed, that it is only the rice lands, and the parts which are high rented, that are in a tolerable state of cultivation.

What I have said in Dinajpur and Ronggopur concerning the illegal exactions, alleged to be taken by the Zemindars, or their agents, are entirely applicable to this district; and, although the landlords have not here the excuse of the privileges granted in Puraniya to the higher castes, I am persuaded, that in general the people are worse used than in that district, and to this chiefly must be attributed the miserable condition to which many parts of it are reduced.

The tenants of Behar in general transact their own business with the agents of the Zemindars, and it is only among the rude tribe called Saungtar, and in the Bengalese parts of the district, that a kind of chief tenant is employed to transact the whole affairs of the community, a practice, as I have mentioned, that is common in Ronggopur, and which seems to have been once pretty universal in India ; for the chiefs of villages, by whatever name (Mandal, Makaddam, Gauda, Shanaboga, etc.), known, seem to me to have been originally agents for the tenants, and not officers of government, or assistant of the Zemindars, as is now usually the case ; and wherever the native customs have been carefully preserved, and well administered, the appointment of this officer is always regulated by the inclination of the tenantry. In Behar, as I have said, the tenantry have more confidence, and chiefs of villages have in general been disused. The Bengalese are more bashful ; and it is only the Mandal that is gifted with the faculty of speech before a person of such consequence as the village clerk (Patwari) ; nor is it supposed that each Mandal should have audacity enough to find utterance before his landlord ; so that on estates of any size there is a chief Mandal, who is spokesman for the others.

The rents of this district are levied in two manners, Nukudi and Bhauri. The former is a money rent, and is collected by messengers in the same miserable instalments that have been mentioned in my account of Puraniya, and which give rise to all the vexations that are liable to such a mode of collection : but here this rent is free from the evils that in Puraniya have arisen from inequalities of assessment. For although in the part of the district where the revenue is paid to Murshedabad, the assessment on the high castes is trifling, yet the mode of having created the inequality is quite different, and is productive of much less evil, as will be explained in my account of the estates in that part.

Bhauri, is a rent paid in kind, and is confined to the part of the district which is comprehended in Behar, and is chiefly confined also to rice, with a very little on other kinds of grain. It, in fact, is similar to the division of watered crops which takes place in the south of India

and seems to have arisen from the same source, namely, the uncertainty of these crops, which in some dry seasons cannot be at all taken while in others that are favourable they are exceedingly valuable. In the former the tenant could not pay a money rent, and in the latter, it is fair that the landlord should participate. Various deductions before division are made from the heap, especially the whole expense of harvest ; and, after these deductions, the landlord in some places receives one-half, in others  $\frac{2}{3}$ ; but then the landlord, as I have said, is at all the expense of the canals, and generally at all that of the reservoirs for irrigation, and the harvest, one of the heaviest deduction is in favour of the tenant. In my account of Mysore, however, I have taken occasion to show that this practice is a great encourager of sloth; and as a means for collecting the revenue of the state is liable to the most gross abuse. Even here, where the Zemindars might be supposed capable of attending to the division, the collusions of their agents and the tenants, I have little doubt, produce numerous frauds, and have given rise to the following mode of avoiding the actual division. It has been customary for the Zemindars to send persons to value the crops and to make an agreement with the tenants for a sum of money in place of his share. The tenants, so long as the estates continued in the management of the Zemindars, were abundantly satisfied with this plan; but some persons, who have farmed the rents of certain estates, have of late given occasion to heavy complaints; and the tenants allege that they are not at all consulted in the valuation, and are compelled to pay much more than the real price of the Zemindar's share. Tenants who hold lands by Bhauli are in fact no better than the Adhiyars of Puraniya and Dinajpur, only that no man's whole rent is paid in that manner. It is evident, however, that the landlords, on the whole, must have been defrauded, as many of these tenants live as easily as those of districts, where the rent does not amount to more than one quarter of the gross produce, and is often much less; and many of them here are of high castes, and abundantly indolent and careless.

The tenures, by which farmers in this district hold their land, are extremely various, and shall be detailed

in the review of particular estates. I shall here only mention a few circumstances of a more general nature.

With regard to the duration of the leases, some part is in perpetuity. Some of these are held by persons of high rank, and considerable possessions, being called Rajas and Tikayits, and according to the regulations these ought to have had their lands separated from the Zemindaries, to which they belonged, when the under Zemindars, at the perpetual settlement, were freed from vassalage ; but being then totally ignorant of the law and customs of Europeans, they were persuaded to avoid applying for this relief until the time allowed had elapsed. This they now bitterly repent. Some of them, having had their leases confirmed by the European officers of revenue, refuse to submit to any renewal, and their lords are earnestly soliciting them to accept of new leases on any terms, in order to set up a claim of the investitures being only for life. Others, who have quietly submitted to this rule, now find that they are harassed by claims on account of the renewal. In the wilder parts of the district these various claims have produced the most violent dissensions and heart burnings, and nothing but the fear of a superior military force has prevented the parties from having had recourse to arms. These tenants, as I have said, are often men of considerable rank, but by the Zemindars are called Ghatwals, or guards of passes. Some of them still are bound to attend their lord, or to assist the officers of police, with a certain number of armed men ; while others are bound only to pay a certain sum of money. It is most notorious that the lands of these latter are comparatively thriving, and that progress is daily making in bringing more into cultivation, and in introducing comfort and the arts ; while the lands held by the military tenure are going backwards ; nor in the present state of affairs do these military services seem to be at all requisite ; while, if any military force was required, this would be totally ineffectual. In these military tenures another cause of dispute has arisen ; the landlords pretend that a certain extent has been assigned to each Ghatwal, or tenant, according to the number of men, that he is held to maintain, and that on condition of the military service the tenant is entitled to hold this for

two anas a customary bigah, or less than one ana for one of the Calcutta measure ; but if any more land is cultivated in the villages occupied by the military tenants, it is liable to full rent. The tenants deny this, and allege that the whole villages, which they occupy, were assigned to them for the support of their men, and the payment of a fixed sum in money, and that they may cultivate as much or as little of the land as they please. I would earnestly recommend that a complete investigation of these disputes should be made by a gentleman of rank and experience, deputed for the purpose, and that the military tenures should be totally done away. Whatever profits arise from the abolition should fall to the state, as in making the settlement more than ample deductions were on this account allowed from the revenue, and the lowness of assessment has been productive of no less evil to the Zemindars and tenants than to Government. The person employed in the investigation, having examined the necessary documents, should finally determine what each of these under-tenants should pay to the Zemindar, either annually or on a renewal of investiture and the exact boundaries of their respective possessions. He ought then to proceed to an agreement with the military tenants, both chiefs and privates, giving them on account of a sum to be paid annually, a total exemption from attendance. At present the privates are removable at the will of the chiefs, but were this practice to continue, after the necessity of their services had ceased, these men would be removed to make room for more industrious tenants, and being unable to work and having no character to enable them to procure a living by alms, they would of course become thieves. They ought therefore to be secured in perpetuity, or at least for life, in the possession of the lands which they now occupy, but, on account of the exemption from service and security of possession, at a rate somewhat higher than what they now pay, and the difference should go to the chief to enable him in part to make up his engagements with Government.

Formerly the custom which I mentioned in my account of Puranya, of not fixing the rent until the crop

had been sown was common, but fortunately it has now in a great measure gone into disuse.

It must be observed that, except in the leases in perpetuity, few or no tenants, especially in Behar, have any proper document either for the extent of their possession or the amount of the Zemindars' claims. The leases, as they are called, are granted to two or three chief men of the village by name, with an etc., comprehending all the others ; and they do not specify even the total of the lands, nor the total amount of the rent, but merely the rate of rent ; and sometimes not even that, but only command the tenants to work, assuring them that the customary rent alone will be demanded. At the times of payment bills are made out according to this rate, for each tenant, and after having paid these for one year his rent cannot be increased without its being alleged that he has cultivated more or better land than he at first did. Great room, however, is left for unjust demands of this nature, as in the bills there is nothing specified but the amount of the rent in money ; and the practice of such vague agreements exposes the Zemindar as much as the tenant to fraud, as his agents and the tenants may enter into collusions in forming the first bills. Such practices in letting leases are, I believe, contrary to law but I do not know that it is any officer's duty to bring the guilty to punishment or to investigate the matter without a formal complaint being entered before a Judge.

✓ Having now finished what I have to state concerning the tenantry, I proceed to give an account of those who cultivate lands in which they have no property. When treating of domestic slaves I have already said all that has occurred to me concerning such of these as are employed in agriculture, I shall now therefore give an account of those who cultivate for a share of the crop, of those who are hired by the month or season, and of those who are usually hired by the day, only premising that, as taking hire is considered as very disgraceful, few, even of the poorest farmers, will acknowledge that they perform any work except on their own farms. It is, however, usual to bring as many ploughs to work on the same field as possible, for it is alleged that six ploughs

in one day will produce more effect than one plough in six days ; and it is the custom to transplant, weed, and reap a field at once, probably for the sake of tumult and bawling in which the natives delight. Poor neighbours, therefore, usually unite on such occasions, and by turns work in company on their respective possessions.

I have already mentioned that many tenants who have leases may be said to cultivate for a share, and are often supposed to give more than a half of the produce to the landlord ; but there are very few who cultivate the lands of tenants for a share, and in the Behar part of the district they are in general confound with under-tenants, who pay a rack rent, under the general name Kurtali ; while small tenants, who have only stock for half a plough, are called Adhiyars ; but in Bengalese part those who cultivate for a share are called Adhiyars, while under-tenants are called Kolayit. It is there that those who cultivate tenants' land for a share are most common, and none of the rent there consists of a share of the crop.

In the Behar part of the district, ploughmen are seldom hired by the year, but generally for the ploughing season alone. They usually in fact sell themselves for that time ; for they received from 5 to 20 R. as a loan, without interest, and, until they can repay that, they ought to work every ploughing season for their master, receiving daily about 3 sers, Calcutta measure of rice in the husk, or of some coarse grain. If the master has 4 beasts, the ploughman works 6 hours ; if there are 6 beasts he works 9 hours. He does nothing for his master but work the cattle, either in the plough, or with the plank or rake ; so that, if he is industrious, he may do little jobs in the afternoon, but in many places the men are too indolent to take advantage of this. When there is no ploughing, the servant is usually employed to weed or transplant, getting a trifle more than his common allowance of grain. The whole profits on harvest is secured by the master to his own ploughman, as far as possible, and many contrive to have the advantage of two harvests ; as in the southern and northern parts of the district the seasons of the prevailing crops are different, so as to admit of the same persons sharing

in both. Although the allowance for harvest is smaller than in Puraniya, yet the sharing in two harvests, and the higher allowance given daily, render the condition of the ploughman here somewhat better, so that a man and woman who have two children, can spend 2 rupees a month; and it is not alleged, that many of them run away. The money advanced defrays the expense of marriages, funerals, and such ceremonies, and is lost when the labourer dies. His allowance of grain and harvest may amount to 15 R a year. The woman makes the remainder, in which she is very much assisted by gleaning, most of the reapers having a strong fellow-feeling in leaving her a large quantity of ears. Owing to the extravagant jealousy of the men the women here can, on the whole however, gain less than in Puraniya. In the Bengalese part of the district the ploughmen usually receive from  $\frac{3}{4}$  to 1 R. a month, besides food and clothing, but are engaged the whole year, and perform every kind of labour. Of course their condition is better than in the western parts.

In the southern corner of the district, Belpatta and Kalikapur, although the language spoken is a kind of Bengalese, the ploughmen are called Kamiya, and Krisan, the usual term, is applied to another class of labourers. These have neither provisions, land, stock, nor seed, but borrow the whole, and cultivate as much as they can. When the crop has been reaped, and the expense of this operation deducted from the general mass, the master takes double the quantity of the seed. The remaining produce is divided into three equal shares, of which two go to the master, and one to the Krisan; and out of this he repays whatever provisions he has borrowed, with an addition of 50 per cent. Such people are exceedingly poor. The reward for those who tend cattle is every nearly the same as in Puraniya; old men, women, and boys can at least procure a supply of food by tending the cattie that remain in the villages; and those who tend cattle in the wastes have higher wages than ploughmen; and it is alleged, derive very considerable advantages from the milk, of which they defraud their masters; but, as I have said, they lead a hard life, although not one of severe labour.

There are in this district a few Chauthariyas, who, as in Purainya, plough twenty days on their master's field, eight on their own, and two on that of the person who tends the cattle, the master furnishing the plough and cattle.

Day-labourers here receive about the same allowance as in Puraniya, that is, about 3 sers of grain a day, or money and grain to the value of between from  $\frac{3}{4}$  ana to 1 ana a day. The condition of the labourer is here no worse than in Puraniya; that of the ploughman is better; nor have I heard, that day-labourers here are paid in advance, except when wanted by Europeans. Their number is very considerable.\*

## CHAPTER 8TH.

### OF ESTATES.

#### SECTION 1ST.

##### *Of Estates in General.*

The free lands are exceedingly extensive, but in treating on particular estates I shall have occasion to mention more of their state and extent. There is great reason to suspect, that a vast extent more is held by the owners, than what their grants warrant, as Yamuni, no doubt the largest free estate in the district, is stated to contain only 25,000 customary bigahs, but to this I shall have occasion again to revert. This and Abhaypur are the only two free estates of any consequence; the remainder is frittered away among a number of petty owners, who, a very few excepted, are neither of the smallest use nor ornament to society, and much of it, as usual, has been diverted to purposes totally different from what was originally intended. But these evils are without remedy. In this district it is reckoned to be much in the same state of cultivation with the adjacent zemindary lands: but it is undoubtedly in general of the best soil, no hills, so far as I can learn, being included in its measurement, and a very large proportion is situated in the best occupied parts of the country. The exact amount of the free land in the part of the district that pays its revenue to the Collector of Murshedabad, I did not learn.

But what is contained in the public registers of free land is not all the land given free of rent, or for a trifle, that has been appropriated for various purposes, and has contributed to reduce the revenue of the district to a trifle.

The whole of the establishment of armed men, kept for overawing the mountaineers, has for its support been allowed 71594 bigahs customary measure generally much larger than the Calcutta standard. I have already mentioned my opinion, that this establishment is totally useless, and I would recommend, that the whole should be put under the management of 2 Tahasildars, who might transact also all business with the mountaineers, and who might act as officers of police for such of the low-landers as live intermixed with the two hill tribes. The persons now acting as Ghatwals or officers of the armed rabble, might serve as the deputies of the Tahasildars or stewards, in bringing lands, that are not now occupied, into cultivation further, as I would propose, in order to avoid rendering them desperate, that the armed men should for life retain their possession; the lands, as they became vacant, should gradually revert to the state, and should be kept, until the whole was fit for granting as Zemindaries. The Suzawul informs me, that he once attempted to bring the unoccupied lands of the Madhuban Ghatwali into cultivation on the Company's account, there not being one armed man belonging to that station, which, were any disturbance intended, is the one of by far the greatest importance. According to his account, he would have succeeded in bringing people, when, on a complaint from the Zemindars of their tenants deserting to him, he was ordered to desist. While such imbecility exists, and attention is paid to such idle pretexts, the condition of the district need not excite wonder.

The Ghatwali establishment of armed men, intended to secure the passes through the woods of the south has been another burthen, concerning which I have very lately had occasion to make mention.

Still another heavy burthen has been imposed on the revenue of this district. Many colonies of invalid soldiers had lands assigned to them, and their families, as part of their subsistence, and as a reward for their services. For the life of the invalid he was to pay nothing for these lands, but his heirs were to pay a small assessment either to the company or to the landlord, according as the lands had been purchased by the state, or allowed to remain the property of their original owners. It has however been

found, after an enormous profusion of unnecessary expense, that the expectation of rendering this a comfortable provision for the invalid, was fallacious; and, since I commenced the survey, the plan and most judiciously been abandoned. For the future the invalids will be rewarded in money, much more suitable to their habits and infirmities, much less expensive, and more easily regulated. Those, who have accepted lands, will of course retain them; but in the course of time their heirs will become liable to a rent, which on the lands purchased by the Company will be an addition to the revenue. The whole land purchased in this district by the company, on account of the invalids, amounts to 148,451 bigahs of the measure used in that establishment (110 cubits square) equal to above 234,000 bigahs Calcutta measure. Part of this, owing to failure of heirs and other causes, is now under the management of the Collector, and the whole in the course of time will pay a rent, and may be converted into zemindaries; but, as great deal is waste, it would not be prudent to make a final settlement, until the whole is brought into cultivation, provided it is found that a collector can effect this improvement. Under existing circumstances this seems doubtful, and some of the lands, that are in the worst condition of any in the district, have been under the management of the collectors. I do not by this mean to say that the gentlemen who have held the office have been at all blamable; there may be defects in the present rules, by which they are ordered to act, that render an effectual superintendence on their part altogether impracticable. It must indeed be observed, that these rules are not intended for levying the rents of an estate from a tenantry; but for collecting a land-tax from landlords.

What I have said in my account of Puraniya, concerning the manners, conduct, and education of the Zemindars, is in general applicable to those of this district; except in one point, in which the Zemindars here most eminently differ and honourably distinguish themselves. In general I found them most attentive and polite to me as a traveller, and more especially those of the highest families, and greatest possessions. Some new and low men about the capital were reserved; but everywhere else I was visited and received with great cordiality; and every assistance

was given to supply my wants. The titles assumed by the chief families will be found in the account of the particular estates.

The general management of estates is nearly the same as in Puraniya, only less of the rents, at least until very lately, were farmed out to middlemen, called here Mostajers; but in the southern part of the district the term Mostajer is given to large farmer, who take a considerable extent, and relet it to under-tenants. Some of the estates under the immediate management of the landlords, are badly enough conducted; but all, or at least most of those, whose rents are farmed, are going backwards, and it is much to be regretted, that the pecuniary difficulties of the chief Zemindar have lately induced him to adopt this management, which has already produced great discontent among his tenantry, and threats of their deserting their possessions. While under the management of his stewards, it had been gradually improving. When the rents are farmed, the Mostajer generally engages to pay the whole rental that appears on the books of the estate, after deducting the establishment, and this is carefully preserved; so that his only legal profit should be what waste land he brings into cultivation. As I have said, little can arise from that point, most farmers leaving the estate as bad, and often a great deal worse, than when they took it. Besides, many, I understand, give large sums to the owner for the farm, and of course make up this and a profit by vexing the tenants. These, however, are often able to bear additional payments, having much more land than that for which they pay.

The Zemindars, notwithstanding the indulgence that has been shown them in the assessment, have not the least confidence in the perpetual settlement, and take every means in their power to conceal their profits. Imagining that I had come with a view of inquiring how far their taxes might be increased, they were in general anxious to show me statements of their condition, by which it appeared that they had little or no profit. Some, indeed, pretended, that their lands were an expensive burthen. So far as I could understand, these statements were copies of what they had shown when the

settlement was made and seem to have been the foundation upon which it was conducted. I have not the smallest doubt, that these statements are totally unworthy of credit, and that the profits of the Zamindars, where any pains have been taken to cultivate the land, are enormous ; but in many places their distrust and caution seem to have prevailed, and they avoid cultivating more than will just enable them to live, and pay the trifling revenue that has been imposed. Some part of the settlement was, I believe, made by measure, and a certain number of bigahs have only been conveyed by the deed. In many such cases I am persuaded, that an actual measurement would discover that the Zamindars possess much more than their right, and it would be of the utmost advantage to the country, were they deprived of the overplus. The number of bigahs, which their rights convey, afford abundant means, if used with industry, of giving them ample profit : and of this they would more avail themselves than they do at present, when the immense possessions that they hold for a trifle, were they properly cultivated, appear to them a temptation to oppression that Government could not resist. I would on the whole therefore recommend, that a gentleman of experience and activity should be employed to revise leisurely the whole settlement of this district, to adjust the jarring claims of individuals, to assign everyone his due, and above all to secure for Government whatever has not been legally alienated. In doing this he would of course by no means infringe on private rights, but all concessions beyond the exact right would, I am persuaded, be far from a real indulgence ; and a rigid exactation of the public rights, together with an abolition of the superfluous establishments, seem to be the only means left for putting the district in a better state ; although in many points, the losses sustained by the settlement are irretrievable.

The nominal expense of collection in the part of the district especially that belongs to Behar, is not in general quite so high as in Puraniya, but still is enormous, and arises from the same causes.

## SECTION 2ND.

*Of Estate in Particular.*

I shall now, as in the districts formerly surveyed, proceed to a particular account of the estates of Pergunahs, some of which in this district are very large, and often much subdivided. Some of them, perhaps, never belonged to one proprietor.

## PART 1ST.

OF THE ESTATES SITUATED IN SERKAR MUNGER  
SUBAH BEHAR.

Pergunah Bhagalpur (Bhagalpur Glad) is a very great territory which occupies almost the whole of the Kotwali, and Ratnagunj, and part of Kodwar, Bangka, Fayezullahgunj, and Kumurgunj. In all, exclusive of hills, rivers, and barren ground, it may contain, abundantly capable of cultivation, 14,20,000 bigahs, Calcutta measure, or about 900,000 of the customary measure, of which last about 5,50,000 may be actually occupied with houses, gardens, plantations, and fields, and about 3,50,000 are waste. Of course, some such must always remain, for roads, burial grounds, market places, broken corners, and the like, but that need not amount to more than the 50,000 odd bigahs, leaving 300,000, that are unnecessarily neglected for 5,50,000 that are cultivated. In order to form some notion of the state of different parts of the pergannah, I have calculated as follows:—

Calcutta Bigah.		Customary Bigah.	
Total	Occupied.	Total.	Occupied.
Kotwali	1,42,800	1,26,000	90,490
Ratnagunj	5,38,200	4,21,300	3,41,000
Kodwar	1,32,700	84,000	84,100
Bangka	4,36,300	1,51,000	2,76,500
Fayezul-lahgunj.	1,68,228	84,114	1,06,600
Kumurgunj	2,200	1,100	1,400
14,20,428	8,67,514	9,00,190	5,49,110

The usual measure is  $5\frac{1}{2}$  cubits the pole, 18 poles each way, making a bigah. The pole is laid on the ground, so as to measure exactly its length; but with so short a pole, and the carelessness usual in native measurements, the line followed will be seldom straight, and the lines will seldom intersect each other at right angles, and the deviations of both kinds produce, in proportion to their extent, a diminution from the proper size of the bigah. If properly measured, the customary bigah contains nearly 22,725 square feet.

If ever any great proprietor held this Pergunah, it must have been during the time when the Kshetauris are said to have been the owners of all Kharakpur and Bhagalpur, or at least of all the more level parts of these territories; but it would appear that their possessions had branched out into many subdivisions. They still retain a part of this Pergunah and the three Zemindars of this tribe are the only landholders in the territory, that have any claim to ancient possession.

The part of Bhagalpur, that is situated in Thanah Bangka, and which I have estimated at 436,300 Calcutta bigahs, contains three of the subdivisions of this Pergunah. Two of them belong to Kshetauris, who claim a descent from the original Rajas of Kharakpur, and the third belongs to a branch of the Rajput family, which now enjoys that immense estate. I have received no data to form an estimate of the proportion of the land occupied by each division (Tappa) only that the size of that belonging to the Rajputs, and called Mandar, is very trifling, but it is tolerably well cultivated; while the other two are very large, and very much neglected. To judge from a transient view, the Rajputs' share may contain 64,000 Calcutta bigahs, of which perhaps 40,000 are cultivated; but to these I shall again return.

One of the Kshetauris, who possesses Barkop, may possess 248,200, of which perhaps 74,000 may be occupied. The other Kshetauri may possess half as much, in a similar state of cultivation.

Barkop is burthened with lands granted to the Ghatwali establishment for keeping the hill tribes in order to the amount of 5928 customary bigahs; but only 663 are cultivated. Parsanda is on the same account

burthened to the amount of 5191 bigahs, of which 1155 are cultivated. Reducing these measures to the Calcutta standard, the land remaining to the two Zemindars will be to Barkop 238,845, of which 73,954 may be occupied, and Parsanda 115,080, of which 35,178 may be occupied. Besides each portion has been burthened by a deduction of 3 villages, under various pretences; but two only remain attached to the Gods' services, for which they were intended, four have fallen into the hands of the late Kanungoe or register of the Pergunah, and this officer seems to have squeezed something from most of the Zemindars, while the son continues to have the character of a purse-proud litigious upstart. Probably however at least 1/20 part of each estate now belongs to the descendant of the Kanungoe, free of rent. Barkop pays to Government a trifle more than 2600 R. Parsanda half as much.

According to the family traditions the ancestors of Dev Barma had long been Rajas of Kharakpur, and in my account of the castes I have mentioned the traditions concerning the Kshetauri tribe, to which this family belongs, and in the topography of Tarapur I have described the traces of their palace. In the time of Dev Barma, the king of Dilli, having a celebrated prize-fighter (Mal), sent him towards Bengal to challenge all the people in that quarter. On this man's return, covered with glory, he wrestled with Dev Barma, and was thrown. The king, anxious to have in his service a person of such bodily endowments, sent for Dev Barma; but he, being as usual afraid, sent in his stead a very strong Rajput, his servant, who was desired to personate his master. The king received him very kindly, and having made him a Moslem, and given him in marriage a lady connected with the royal family, sent him in command of some troops, with which he expelled his old master from Kharakpur, and was ancestor of Kaderali, who now enjoys that estate. It must be observed, that the family of Kedarali gives a totally different account, and one, according to European ideas, infinitely less to its credit, which will be afterwards mentioned. Dev Barma with his Kshetauris, having been expelled from Kharakpur, retired to a place called Saruigram,

where he was followed by fresh misfortunes. Having disputed with a Kanoj Brahman, named Dube Bhayharan that person, in order to be revenged, ript up his belly, became a devil, and many of the Kshetauris perished from the diseases which he inflicted, and now he is a common object of worship among the peasants of these parts. Dev Barma, being no longer in safety at Saruigram, retired to Lakshmipur. At that time Parsanda abounded in robbers, and a noble (Nawab) of Rajmahal, having had his people plundered, as they were passing Pyalahpur with money, applied to Dev, as being a man of known courage. Dev soon dispersed the gang, and presented the noble with the head of the ringleader, and in return, obtained a grant of the lands, which now belong to his descendants, they being then a mere forest. In the Fusli year 1007 (A. D. 1600) he was succeeded by his son Amar Barma, and all persons of this family use Barma as a surname, which need not here be reported. In 1043 Amar was succeeded by his son Tilak, who enjoyed the estate until the year 1094, and left five sons—1st Mani, the eldest received 2/3 of his father's estate, now called Tappa Barkop, and enjoyed this until the year 1110. He had two sons, Kirti and Mahtab, the latter of whom died without children. Kirti enjoyed the estate only until the year 1120, and left two sons, Jagat and Ram. Jagat held the estate until the year 1127, and although he had children, was succeeded by his brother Ram, who retained possession until 1171. When he succeeded, the times were probably too troublesome for a boy to retain the estate. Ram had no son, and was succeeded by Khosal, the son of Agar, son of Jagat, who held the estate until 1173. His brother Chhatra is now alive, and is chief of the armed men, that are employed to protect the borders from the mountaineers, and seems to be a man respected or feared in the vicinity. Khosal was succeeded by Ajit Barma, now Raja of Barkop. He is a young man, approaching in imbecility very near to an idiot, and seems to be in the hands of sharks. His abode is totally unbecoming the residence of a gentleman of his birth and estate; and in fact is inferior to that of many tenants in Dinajpur and Ronggopur.

The second son of Tilak was Chhatra or Chandra who received  $\frac{1}{3}$  of his father's estate, which now constitutes Tappa Parsanda, and was followed in regular succession, from father to son, by Gaj, Dular, Sital, Futeh, and Tej, who is now the Parsanda Raja. When I visited his place, he happened to be absent at Bhagalpur; but an old relation received me kindly, and his affairs seem to be in rather better hands than those of his kinsman; but his abode consists of some mud huts huddled together, and only one or two of them have two stories.

In Barkop, the leases are called Meyadi, all for a short number of years; and when these expire, a new bargain is made for what pays money rent (Nukudi); but three-fourths of the rent is levied by a share of the crop (Bhauli), which is divided equally between the landlord and tenant, after deducting the expense of harvest; but a valuation is usually made, and the tenant, if satisfied, gives the amount in money. The money rent on lands regularly cultivated is one rupee a customary bigah, good or bad, which is at the rate of about 10 anas Calcutta measure; but the Zemindar complains that the tenants never cultivate the fields for more than two years, and then desert them, and go to another waste; spot; for large deductions are made to all those who take in new lands, a trifle called Khil being accepted for the first year, and a very poor rent (Kum) for the second. This is intended as an inducement to bring new settlers; but in fact is powerful means of continuing the present waste state of the country; and therefore ought to be most strictly prohibited. In fact the new land is much more productive than the old, and ought rather to pay a higher rate.

Besides these rents, the Zemindar as Chuklahdar or chief of a district, (Tappa) and as Mokaddam or chief of the contained Mauzas (manors), take a commission of  $2\frac{1}{2}$  anas on the rupee ( $\frac{5}{32}$ ) of money rent, and of  $2\frac{1}{2}$  sers on the man ( $\frac{5}{40}$ ) of grain that falls to the tenant's share. At crop season each Mauza also presents him with 3 rupees, and at different festivals with 2 rupees, one male goat, and one pot of curdled milk. The village establishment is chiefly paid by the tenantry. Eleven

(Patwaris) clerks, receive  $\frac{1}{4}$  ana on the rupee ( $\frac{1}{64}$ ) of money rent, with  $2\frac{1}{2}$  sers of grain on each bigah thus rented, and  $\frac{3}{4}$  ser on each man ( $\frac{3}{64}$ ) of the tenant's share of the crop, when the rent is paid by a division. Thirty messengers (Gorayits) are allowed a little land at the expense of the Zemindar, and  $\frac{1}{2}$  ser on the man ( $\frac{1}{64}$ ) of the grain on lands let for a share. Four Baniyas take the same rate, and measure the grain when it is divided. Almost the whole of the rents are farmed out in small lots of from two to four Mauzas for a short term of years. The farmers make with the tenants a bargain for the duration of their engagements; and the tenants allege that they are so squeezed that the cultivation is gradually diminishing. The farmers of the rents have no authority to dismiss any of the village establishment.

The general establishment, kept up to collect the money from the farmers of the rents, is as follows: one Dewan or superintendent, 5 Rs. a month. One Gomastha or agent, 7 Rs. a month. Three Accomptants (Mohurers), 10 Rs. 2 anas a month. Five Peyadahs or guards,  $7\frac{1}{2}$  R. a month. Two Kotwals or messengers, 25 bigahs of land. It is evident from these allowances, that each must have perquisites at the expense of the tenantry.

In Parsanda the leases are also granted (Meyadi) or from two to nine years. One-fourth of the land pays a money rent, the remainder pays one-half of the crop. Rice land (Sali), and land (Kheri), said to produce two crops, that is high land in full cultivation, pays money rent from 12 to 22 anas a bigah, customary measure; land of an inferior nature (Vari), if cultivated with the crops called Korwa (Kulthi and Arahari), pays 2 to 4 anas; and if cultivated with winter crops, it pays from 6 to 8 anas. Here also the Zemindar complains that the farmers will not cultivate more than two years on account of the deduction of rent made for that period. The Zemindar is also Chuklahdar, and on that account, when the crops are divided, he takes one-half of the gross produce, with a commission on the gross produce of ( $\frac{3}{64}$ )  $\frac{3}{4}$  ser on the man. The high castes, all those who lease lands for cultivation, tanners, potters, blacksmiths, washermen, and barbers, pay no ground rent for their

houses. All others pay at the rate of  $57\frac{1}{2}$  anas a bigah. The village establishment is in general paid by a commission on the gross produce of the land rented by a share of the crop.

Ten Patwaris (clerks) receive  $\frac{3}{4}$  ser on the man ( $\frac{3}{160}$ ) of grain, and the Zemindar gives them  $\frac{1}{4}$  ana on the rupee ( $\frac{1}{64}$ ) of the money rent.

Fifteen messengers (Gorayits) are allowed  $\frac{1}{4}$  ser on the man ( $\frac{1}{160}$ ) of grain, and from 1 to 5 bighas of land each.

Six Baniyas or measurers, are allowed  $\frac{1}{4}$  ser on the man ( $\frac{1}{160}$ ) of the gross produce.

A much smaller proportion of the rents are farmed than in Barkop, and the estate is not in quite so bad a condition. The general establishment is, one Agent (Gomashtah)  $7\frac{1}{4}$  R. a month. Two Accompanys (Mohurers). 6 R. a month. Two Vakils or agents to attend the judge and collector, 2 R. Sixteen Peyadahs or guards, some receiving lands, some 2 R. a month,

Many years ago a Kshetauri named Kalyan entered into the service of Dariyar, a Nat Raja, who seems to have been chief of the northern tribe of mountaineers, lived in the valley surrounded by their hills, which has been described in the topography, and possessed many lands in the vicinity. The son of Kalyan, according to the family traditions, was named Rupkaran, and was appointed by his master to be Thanadar or Commandant of Lakrugar, the principal stronghold in the territory. Some time afterwards, in the Fusli year 1007 (A. D. 1600) when Akbur sent Man Singha to settle the affairs of Bengal, that person halted for some days at Shahabad, having heard, that Sobha Singha, a chief of Bengal, was likely to be troublesome. While Man Singha halted in the vicinity, Rupkaran waited on him, and offered his assistance, which gave great offence to his master the Nat who was in league with the Bengalese chief, and had collected a force to attack Man Singha, while he should attempt to pass the defiles. Rupkaran then, deserting his duty, took a party of men from Man Singha, and expelled his master. He then advanced with Man Singha to Bengal, and his family entirely attribute to his prowess the overthrow of Sobha. It would

appear, indeed, that he had rendered essential service, as his rewards were considerable. In the first place he obtained (in Munsub Jaygir) free of rent, and in perpetuity, 5 Pergunahs, namely, Dursuraf in Puraniya, already mentioned; Yamuni and Akburnugar in Rajmahal, and Majhuya and Kangjiyalā composing the valley included by the hills of the mountaineers. Besides this he procured as a Zemindary Tappa Manihari a part of the Bhagalpur Pergunah. I now proceed to treat of this, but shall afterwards resume the subject of this family's affairs. Man Singha conferred the title of Raja on his favourite, who enjoyed the estate until the Fusli year 1015 (A. D. 1608). His son Bariyar was Raja until the year 1023. His son Chaitan ruled nine years. His son Aku 7 years; his son Paku 11 years; his son Udwān 9 years; his son Pratap 7 years. He went to Dilli, and received the king's confirmation of his titles. His son Mani ruled 9 years; his son Khosal 8 years; his son Harchand 20 years; his son Ram 17 years; his son Mahakum 22 years; his son Narayan 15 years; his son Kari 4 years; his son Bhawani 1 years; his son Sujan 25 years. He was a principal instigator of the mountaineers to insurrection, but afterwards disputed with them and was compelled to leave Majhuya, where his ancestors had resided, and to retire to Mowara in this Pergunah. The whole of his estates, except that in Puraniya, no doubt suffered much during these disturbances; and although the estate in Puraniya should have secured him from want, a monthly pension of 105 R. 9 A. 15 G. was settled on him by Mr. Cleveland, and is still continued, notwithstanding the great estates still belonging to the family. He was succeeded by his son Gujaraj aged 36, who has received the whole estate, although he has a brother. Both are said to have been fine boys, but on approach to manhood, both became idiots, and are as weak in body as in mind; but they are perfectly tractable and good natured.

What is calculated to be 11/16 of the lands in Fayezullahgunj amount, according to the Zemindar's accounts, to 186,057 customary bigahs, but according to my calculations 11/16 of the measureable lands should

contain 199,000 bigahs, no very essential difference, as many portions of waste land and broken corners will always be omitted in the most careful measurements of the Zemindars, and it is reasonable to suppose, that each has somewhat more than what his title bears. I do not therefore think that my calculation is materially wrong; and by the same rule Manihari, which is estimated at  $\frac{3}{16}$  of the whole, should contain 86,000 arable bigahs Calcutta measure. While the customary measure, in this Tappa alone, being only 18 Kathas of  $4\frac{1}{2}$  cubits, the customary bigahs will be nearly 84,000, but from this many deductions are to be made.

The Kanungoe or register above mentioned procured 2 Mauzas, called Nankar, for which he only pays 200 R. a year to the Company. He also obtained 3 Mauzas as a lease in perpetuity (Estemurar, Makurruri) for 40 rupees a year paid to the Zemindar. These 5 Mauzas are said to contain 2208,18 bigahs, of which about 1800 may be cultivated. other 8 Mauzas have been granted on similar low leases, and may contain 4200 bigahs.

In Jaygir, it is said, that there are 35,000 bigahs of which the Ghatwal, or armed establishment, has 18,815. which in fact belong to Company. This is in a bad condition, as are also said to be the remaining 16,185, which belong to the Raja. It is calculated, that  $\frac{3}{6}$  of the whole have been granted as Khanahvari, or as a maintenance to various persons; of these the Raja has for himself 2 whole Mauzas, and 2000 scattered bigahs, perhaps in all 3000 bigahs. These lands are tolerably cultivated. There is besides in various free estates, including the Raja's Jaygir, about  $\frac{1}{4}$  of the whole or 21,000 bigahs, of which  $\frac{3}{4}$  are cultivated. Deducting these there will remain 22236 bigahs, of which onehalf is occupied. Such was the account given by one of the agents employed in the collection; but there is great reason to think that it is totally erroneous, and has been made up to the account for the lowness of the produce, and with a view to induce the family to submit to this; various claims on their part have been admitted, which the ignorance and imbecility of its head have induced him to receive as substantial benefits. The whole Jaygir land was stated at 35,000 bigahs, and of this Raja claims 16,185; but in fact the

Ghatwals, according to the official documents, possess 20,542 bigahs, of which 8858 $\frac{1}{4}$  are cultivated, and the Raja's claim must therefore be reduced to 15,458. In fact however his right to such a Jaygir is totally unsupported by the register of free lands. Again the whole Khanahvari in the Pergunah amounts only to 2872 and some of this belongs to other Tappas, so that on this account we may add 13000 bigahs to the assessed land; and also the 15,458 bigahs of pretended Jaygir; for, although it may be said, that this 15458 make a part of the 4 annas of free land, the evident falsehood of the claim renders the existence of the remainder of that claim extremely doubtful, so that I have little hesitation in stating the assessed lands to be at least 50,000 bigahs. Of this about  $\frac{1}{2}$  is cultivated. What share however is actually allowed to the Zemindar free it is impossible to conjecture.

Each tenant has a separate lease, but neither the extent of his lands, nor the total amount of the rent are mentioned. It is only the rate of rent, and only what is actually cultivated [that] pays. Very little is let for a share of the crop. The Bhadai or summer crop pays from 2 to 10 anas the bigah, the Rabi or winter crop pays as much, winter rice (Khariph) pays from 2 to 12 anas. It must be observed, that in the adjacent estate of Barkop, the term Khariph is applied to Kulthi and Arahari, and not to rice. The highest sum is usual rent; the lower rates are only for the land that is given to new settlers.

The village establishment consists of six (Patwaris) clerks, who receive from the Zemindar  $\frac{1}{4}$  ana on the rupee ( $\frac{1}{6}\frac{1}{4}$ ) of the money rent; 52 Pasbans or messengers, who receive in all 380 bigahs of land, and subsistence when on duty at a distance from home. The chief establishment consists of one Tahasildar or steward, at 18 R. a month. Two Peshkars or assistants, at  $5\frac{1}{2}$  R. each per month. Two clerks (Mohurers), at 5 R. each per month. One Fotdar or valuer of money, 2 R. per month. Six guards, at 2 R. each per month. One sweepar, at 4 anas per month. Sacrifices (Dev-Khurch), 3 R. per month. Stationery, 2 R. per month. This establishment, it must be observed, is decently paid,

having been appointed by the collector, when he managed the estate by an agent.

It is now perhaps merely nominal. The tenants on the assessed lands are said to amount to 2007.

In the Fusli year 1200 (A. D. 1793) when the Raja became incapable of business, his mother managed the estate for four years, the old Kanungoe being her security, and appointing a man to assist her, that is to say, to take most of the profits. The old lady probably being refractory, he withdrew his security ; and the rents were farmed by a Golam Nubi for five years; but he being unable to fulfil his engagements, the Collector managed the estate by an agent. In 1213 (A. D. 1806) the rents were again farmed, it is said in fact to a Bhagwan Datta who is Sereshtadar of the court, but the farm is granted in another name. Every person on the estate however seems to consider Bhagwan Datta as the real manager. He pays 8614 R. a year, which after deducting the revenue (8192 R.) leaves an income for the Raja of 422 R., but, as I have said, it is impossible to say what his real advantage is, unless we could ascertain the real extent that he is allowed to hold free. This both he and the manager are desirous to keep private. In order that he may appear poor, and to be an object of charity entitled to the pension, the family is not willing to push the manager ; and in order to render his accounts plausible, the manager is desirous to extend the family claims. The 422R., however, is said to be about twice as much as the family received when the estate was managed by the agent of the Collector. The present farmer of the rents has relet part of them to 109 petty tyrants, and manages part by his agent (Tahasildar). Notwithstanding this the country is in a much better state than Barkop or Parsanda ; and, as it was fully as much exposed to the depredations of the hill tribes, I can only attribute this to a higher assessment. These two immense estates pay only 3924 R. and little more than  $\frac{1}{4}$  is cultivated ; and this territory, at any rate comparatively small, and, if all claims are allowed, very trifling, pays 8192R, and is half cultivated.

I now return to Tappa Mandar, belonging to a branch of the present family of Kharakpur, and which

I have stated to contain about 64,000 bigahs, of which about 40,000 may be cultivated, and its superior condition to Barkop and Parsanda, in its immediate vicinity may be attributed to four causes ; first, it is much higher assessed, paying 1600 R. a year; secondly, it has no sort of Ghatwali or irregular military establishment, a constant source of indolence and disorder; thirdly, the amount of the rents is generally stated in the lease, without rate or measurement; and fourthly, the rents are not farmed. It is worse cultivated than the lands north-west from it, owing to being lower assessed, and it is better cultivated than the lands south from it, which are infested by the Ghatwali rabble.

The origin of this family, which owns Mandar, I shall leave until I come to treat of Kharakpur, and I shall here confine myself to this branch, the first of which, according to the family tradition, was Vasudev, the second son of Singhal Ray; a Rajput who lived in the west of India. Vasudev obtained Mandar, and had three sons, Silmanta, Chhatrapali, and Bhuwal. Chhatrapali, although second son, on account of his personal endowments, seems to have managed the whole estate, and erected the first temple of Madhusudan. An inscription on one of the buildings there, mentioning the latter circumstance, is dated in the year of Saka 1521 (A. D. 1599). He had no son, and his two brothers seem to have divided the estate equally. Silmanta the eldest was succeeded by Vikramaditya, Dumbarjit, Tilak, Partap, Kungjal, and Janggali now head of this branch; but Bhola, Omrao, Manorath, and Binod his kinsmen have shares of this portion. Bhuwal, the third son of Vasudev, was succeeded in a direct line by Chandrasas Ray, Uday, Parwal, Dhara, Harchand, and by Natthu and Suphal two brothers, who now possess one half of the estate.

Very little is let on a division of crops, and the tenures, as I have said, seem on a good footing. By far the greater part is let at a rack rent for a certain specified sum for each farm, without any rate or extent being mentioned. This tenure is called Moshukkushi. The leases are, however, rather too short, being only from three to seven years. A little is let from year to year by

a certain rate for each bigah. This is called Bighati. The rents are said to vary from 2 annas to  $1\frac{1}{4}$  R. a bigah, the low rates, as usual here, being given only to new comers as an encouragement, and amount to very little of the whole.

These are the outskirts of the Pergunah of Bhagalpur, which are indifferently cultivated, and very low assessed. The remainder is tolerably cultivated. About a tenth-part of it, indeed, scattered in Kumurgunj and Fayezullahgunj, is only about half occupied, owing to the contagion of bad neighbourhood; but of the remainder, about 70 per cent. is occupied. The free land in the whole Pergunah, entered in the public registers, is 62,476 bigahs and nine entire Mauzas; six of these are in the outskirts already mentioned, and if all the land, claimed there as free, were admitted, it would occupy nearly the remainder; but, so far as I can judge from the documents before me, the fact is that the real quantity there does not exceed 5000 bigahs, and is probably not so much. I shall therefore reduce the total amount in the well-occupied part to 38,000 bigahs and three villages, for which we may allow 2000 customary bigahs; so that the whole of this portion being about 570,000 customary bigahs, the free land will amount to about  $10\frac{1}{2}$  per cent. of the whole, leaving behind rather more than 510,000 customary bigahs. This portion of land is not burthened by any of the irregular military establishment, but the invalid establishment, occasions a heavy deduction. The portion, however, of this establishment which falls on this part of the district, I cannot exactly ascertain; partly because many of the invalid villages have lands in more than one Pergunah, and partly because the names, by which these villages are usually known, are totally different from their official denomination, so that I cannot trace the respective situations; but perhaps it may be about one-fifth of the whole, which will give about 29,700 bigahs customary measure, purchased by the Company, and 10,000 bigahs still belonging to the Zamindars, but which hitherto have produced no advantage to them. There will still remain 470,000 bigahs at the disposal of the Zemindars, and this pays to Government 85,727.13.7 which is at the rate of  $5\frac{1}{2}$  (5.48) customary bigahs, or  $8\frac{1}{2}$  (8.652) Calcutta measure for the

rupee, on a soil most extraordinarily fertile. The rented land in this part, in its present condition, cannot be less than 348,000 bigahs customary measure, and the rent on this is not on an average less than  $1\frac{1}{2}$  R. a bigah, giving a gross rental of 517,500 R. I do not think that I have in any degree exaggerated this rental, and from thence, together with the other lands of the Pergunah, a judgment may be formed of the care which was bestowed on the public interests in the settlement. The nature of the settlement, however, must in a great measure be attributed to the praises bestowed on the lavish disposition of Mr. Cleveland, which was called a spirit of conciliation, and of course the gentlemen afterwards employed could not be expected to deviate from a plan that had met with the ample approbation of their employers. Had the assessment of the whole Pergunah been made at 150,000 R. with an annual addition of 10 per cent. until it rose to 300,000, I am persuaded every possible inch would have been now occupied, and perhaps the condition of the Zamindars better than at present; for it being judged prudent that all possible means should be taken to conceal the greatness of their profit, vast sacrifices are made for the purpose. Even in the time of Akbur, when the value of money was comparatively high, the Pergunah, as appears from the Ayeen Akbery, (Gladwin's translation, Vol. 2, page 22 of the Jumma), was assessed at 117,403 R. in place of 99,445 R. which it now pays.

Perhaps one half of the rent is paid by a division of the crop, the Zemindar, after deducting harvest, taking one half. The remainder is let for a money rent, according either to 20 different qualities of land, from 1 anna to 4 rupees a bigah ; or according to the nature of the crop; the former is mostly adopted on the high lands, the latter on the inundated. A great many of the leases are Gorabandi, which the tenants pretend to be in perpetuity; but the Zamindars allege are only for life. Others are Meyadi, or for a few years. The village establishment here is heavy; and, when the rents are farmed care is taken to keep it undisturbed.

The Patwari or clerk receives from about  $\frac{1}{4}$  to  $\frac{1}{2}$  anna on the rupee ( $\frac{1}{64} - \frac{1}{32}$ ) of money rent, and generally

$2\frac{1}{2}$  sers on each bigah let in this manner, with  $1\frac{1}{2}$  anna a year, on every house rich and poor. These are paid by the tenant. He gets from the landlord  $\frac{3}{4}$  sers on the man ( $\frac{3}{160}$ ) of all the grain received. The Gorayits or messengers wait on the Patwaris, and get each from 2 to 5 bigahs free from rent, and 2 chhataks of grain on the man ( $\frac{1}{320}$ ) of the rent in kind. The Baniyas value the money, and weigh the grain, and are allowed ( $\frac{1}{160}$ ) of this rent. The potmaker is allowed half as much. The Chuklahdar knows the boundaries, and receives ( $\frac{3}{160}$ ) of the rent in grain. The Dihidar is a land measurer, and watches to prevent the depredations of cattle. These persons are only employed in some places, and get  $1\frac{1}{28}$  of the money rent, and  $\frac{1}{160}$  of the grain rent. Dakchaukis or post boys, get each from 2 to  $2\frac{1}{2}$  bigahs of land free of rent, and transmit from one to another all letters belonging to Zamindars or officers of Government, until they reach their destination. The Dosad watches the village by night, and in the day goes messages, and receives from 2 to 10 bigahs of land free of rent, with  $\frac{1}{160}$  part of the rent in grain. All these charges are paid by the landlord. The tenants pay the expense of measurements, which are frequent. No great extent of the rents are farmed, and the practice is chiefly confined to the remote parts that are half cultivated.

The properties are very small, and the owners prudent careful men. Few of them know anything of their family history, some of them not even the name of their grandfather. Many of the smaller cannot read, and in the whole of Ratnagunj the best part of the Pergunah, no Zamindar who resides has any higher education than to be able to read common accompts, although several of them are Brahmans. Many of them are called Malekiyats or Mokaddams. These were formerly chiefs of mauzas, that had made an agreement in perpetuity with their landlords, and on the new settlement were freed from vassalage.

The following subdivisions have taken place :—

Tappas.	Shares.	Revenue.
Anwarabad .. 12 ..		3373.11.16
Azimabad .. , 6 ..		942.14.10

Tappas.	Shares.		Revenue.
Champanagar	19	..	11758.8 6.2
Chandipa	18	..	7079.15 10
Dakhelkonj	23	..	31404.10 16
Jathaur	4	..	1435.10 0
Nayades	22	..	2700
Puranades	6	..	7707.3 19.2
Rejakpur	15	..	8420.13 4.1
Shujanagar	9	..	6607.5 1.2
Shahpur	1	..	459.10 17.2
Shahabad	4	..	1154.6 12.3
		139	85727.12 18.2

These lots again, such as they appear on public record, are often possessed in common by 5 or 6 persons; and one man is often the proprietor of many lots, so that the number of proprietors may be about the same as that of lots, but the real proprietor is often totally different from what appears on the public books. It will be needless therefore to enter into an account of particulars, especially as no one person is of much consequence. I shall only mention that Sambhunath, formerly the Kanungoe or register, besides what I have already mentioned, possesses 9 lots, for which he pays about 13175 R. Some of these were lands that had been granted to the Kanungoes as a reward for their services (Nankar), and on the abolition of the office were assessed, I understand, at about  $\frac{1}{2}$  of the trifling rate which was imposed on the other lands of the Pergunah. Other portions are purchases or leases now freed from vassalage, which the influence of the family, in all probability, obtained at a very low rate. Only three persons of the family held the office; the grandfather for a short time, the father long, and the present possessor for a few years.

2. Pergunah Kahalgang (Khelgong, Glad.) is a fine estate situated in Fayezullahgunj, Kodwar, Kotwali, Ratnagunj, Lokmanpur, and Kumurgunj. In the time of Akbur it was assessed at 70,000R. It now pays 45, 752 R. of which 1860 are for fisheries, to which lowness of assessment may be attributed a great part of [its] present state. It would appear, so far as I could conjecture,

that this Pergunah may contain as follows, the customary bigah being of the same size as in Bhagalpur.—

Total.		Occupied.	
Calcutta measure	Customary measure.	Calcutta measure.	Customary measure.
6,45,835.	4,44,428.	2,39,661.	1,54,556.

The total free land registered amounts to 21,016 customary bigahs; the land granted to the Ghatwali establishment to 4027 bigahs; in the Invalid establishments, the lands of which, I believe, are in this Pergunah, are 25,048 6, Bigahs of the established measurement, equal to just about 30,000 customary bigahs, the whole purchased by the Company. There remains therefore to the Zemindars, deducting hills rivers, lakes, etc., of land fit for cultivation, and mostly of a very good soil, upwards of 389,000 customary bigahs; so that the assessment, deducting fisheries, amounts to about one Rupee for more than  $8\frac{3}{4}$  (8.864) customary bigahs, or for almost 14 (13.99) of the Calcutta measure. The whole settlement having been made by the bigah, including roads, sands, rivers, free land, land purchased for the invalids, &c, &c, the Company has an undoubted right to measure each estate, and to take the surplus, and I was assured by the head of the family, who some time ago sold the greater part of the estate, that the quantity would be very great, as indeed, after comparing the accounts, given by the present Zemindars, of their estates, with the space occupied on the map, appeared to me to be undoubtedly the case. The rents are in general said to be higher than in Bhagalpur, much good land being let at 3 R. a customary bigah, but much again is said to be let at 6 or 8 annas. I shall suppose however that the same rate ( $1\frac{1}{2}$  Rupee a bigah) is or might be obtained; and allowing the exempted land to be as well cultivated as the assessed, which is not quite the case, we shall have a gross rental, in the present state of cultivation, of above 2,00,000 R.; and were the country fully occupied, without raising the rent, it should at least amount to 5,00,000 R. But the Zemindary would be terrified at such a state of prosperity, and even now are very much

alarmed. They are mostly anxious to represent themselves as very poor, and showed me accounts, as the real state of their affairs, which, I was afterwards told, were exactly similar [to], if not copies of, those which they showed when the settlement was made, and I shall give one of them as a specimen.

	B. K.
12 Mauzas, which belong to } ..	13,335 18
Maniram, a Brahman, contain }	
in all.	

	B. K.
Deduct land purchased for invalids.	993 19
Free land .. ..	754 9
Lands granted to servants, which however is a part of the assessed land.	90 15
	1,839 3
Zemindary lands remain ..	.. 11,496 15
Rivers ..	34 18
Tanks ..	76 18
Reservoirs ..	35 0
Roads and pasture ..	41 5
Gardens ..	22 0
Usari, bad barren land ..	735 0
Kurra, still worse ..	10 0
Balu bord, mere sand, but at present 2201 bigahs of it are the subject of a violent dispute with a neighbour.	8,894 7
	9,849 8
There should remain cultivated ..	2,647 7
But the accompts only admit ..	2,076 0

They also showed me a statement of the rents, and of all the charges of collection, which were very numerous and absurd, and together with the Rusum, or usual commission formerly allowed to Zemindars, when acting as mere Collectors for Government, and the revenue paid to the State, amounted exactly to the rent.

The rents are partly paid in money, partly, but in a small proportion, they arise from a division of the crop, the landlord taking one half, after several deductions, which seem to fall upon both parties pretty equally. The leases are usually granted from year to year, and the

money rent is chiefly ascertained by what is called Halhaseli or Moshukkushi. No extent nor amount of rent is specified in the lease, which only states the rate upon each kind of crop or upon each bigah according to its quality, and only that pays, which is actually cultivated. The whole, it is alleged, is annually measured. Other leases are called Mokurruri, which are only in general for one year, and never exceed two; but the sum to be actually paid is specified in the lease, and the tenant may cultivate the land as he pleases. The high castes are usually allowed a deduction, but not so such as in Puraniya.

The village establishment is said to be very heavy, and to be paid entirely by the landlord. There is reason however to suspect that the establishment which appears on the books of the estate is quite nominal, in order to swell out the expense. Thus on the estate above mentioned, on a cultivation of 2076 bigas, not quite 1100 acres, there were employed 4 Patwaris or clerks, 3 Malguzardars or collectors, 3 Chukladars or men to settle disputes, 3 Baniyas or measurers of grain and valuers of money, Pasbans or watchmen, 2 Gorayits or messengers, and 1 Potter. These in all were allowed  $1\frac{3}{4}$  annas on the rupee, or  $7/64$  of the money rent, and  $1\frac{1}{2}$  ser on the man, or  $3/80$  of the grain rent, with the  $90\frac{3}{4}$  bigahs of land deducted from the general amount. If the whole establishment were kept up it could not on such an extent of land be supported on this percentage, but, as I have said, the landlord probably possesses a good deal more than he pretends, and his estate, although very much neglected, is not near so badly occupied as he pretends. The sands are a mere idle pretext.

The Pergunah may be divided into two shares, Kahalgang proper, subdivided into several Tappas, about the names and extent of which no two authorities are agreed, and Tappa Madhuban.

Kahalgang seems originally to have belonged to a family of Brahmans of the Saryuriya division of the tribe of Kanoj, who possessed it for five generations, and took the humble title of Chaudhuri. Their names were Loka-nath, Narottam, Ramanath, Dinanath and Kripanath; The last person, at various times and for different reasons, alienated by sale all that remained to the family.

for several alienations of another kind had previously taken place. A branch of the family, now represented by Maniram, of whose possessions I have above given an account, received these as an appanage, holding them of the elder branch as vassals (Melk); and several other persons obtained similar favours; but all these were liberated from their vassalage by the settlement of Lord Cornwallis. The greatest alienations, however, as usual, took place in favour of the Kanungoe or register of the Pergunah. This office was held for some time by a (Kayastha) family of scribes, which had divided into four branches. The head of one of these branches, named Giridhardas, having become a Moslem, obtained the whole. His son Rahimullah left the office to Akel Muhammed, and they seem to have acquired a large share of the whole estate, probably from favour shown them as converts; but becoming extravagant, their lands have been sold.

To return to Kripanath, the last chief owner of Kahalgang; he left six sons. The eldest son, Parasnath, has purchased a part of the estate, in the name of his nephew, the eldest of the three sons of his second brother Ganggaram, who is dead. The third son Gaurinath is also dead, but has left a son. The fourth son Matuk is alive, and has three sons. The fifth son is Padmanath, who in the wreck of the family has betaken himself to the proper duties of his sacred dignity, and has made very considerable progress in science, but is burthened with two sons. The youngest brother, Bholanath, is dead, but has left three sons. So that on the wretched fragments of the estate there are 15 males to be supported; for, as the natives suppose, being very unfortunate, the Gods found no difficulty in procuring the souls of miserable sinners good enough to occupy the unhappy lot of decayed gentlemen.

This portion of Kahalgang is now divided, in the public records, into 48 lots, many belonging to sundry partners, and several united into one person's property. One of the lots is the immediate property of the Company, and is managed by an agent of the Collectors. None of the other properties are remarkable, and I find as usual some persons considered as the real owners of

the lands, whose names do not appear in the public records. This division of the Pergunah is much better cultivated than the other, which seems to be owing to the rate of rent being higher. I reckon, that of the 4,44,400 bigahs which it may contain, about 1,45,500, or about  $32\frac{3}{4}$  per cent is occupied; whereas the very utmost which I can allow for Madhuban is 25 per cent. The average rent here is at least  $1\frac{1}{2}$  R. there it is said to be about 9 annas a customary bigah.

Madhuban, although considered as a Tappa of Kahalgang, never belonged to the family which lately was the chief proprietor of that estate. Both however, at one time, probably belonged to a chief of the Nat tribe, of whom I have given an account in the topographical description of Fayezellahgunj. The oil-man, who obtained possession of part of this chief's estates, retained Madhuban until lately, but usually was called the Garhi Zemindar, and has been mentioned as such in my account of Purnaniya; but there a much more rational account of the manner in which the family obtained its possession, than is given in this district, may be found. Having fallen into arrears of revenue, Madhuban was put up for sale; no one would offer; it fell into the Company's hands, and the rents were farmed for ten years, being given to a Munshi Seraj for 2025 rupees. From the records it would appear that he pays only 1700 R. for Madhuban, and 325 for another lot of Kahalgang belonging to the Company; but I presume that the estimates which I received apply to both. The estate contains a great part of the land between Fayezellahganj and Paingti, and between Sakarigali and Bhader, being reckoned five coses from east to west, and as much from north to south, in which case its square contents would be very great, but I prefer going on a more moderate calculation, which makes it equal to an eighth part of the division of Fayezellahgunj, and by this estimate it will contain upwards of 57,000 bigahs Calcutta measure, and more than 36,000 bigahs of the customary rate, of land fit for the plough, and traces remain to show, that almost the whole has once been cultivated, while, where it is now occupied, the crops are, I think, the best that I have seen in India. The agents of the manager allege, that  $5/16$  are occupied, and so far as

they are concerned, this may be the case; but so far as I could judge, the occupied land cannot exceed a quarter of the whole; 7700 bigahs customary measure are said, and I believe correctly, to have been purchased by the Company for the invalids, of which about one-sixth may be cultivated; 4027 bigahs have been allotted for the maintenance of the Ghatwali establishment, but has been totally deserted; setting aside these, the occupied land of the remainder may amount to  $5/16$ , but 2000 bigahs, it is said, are free from rent, and 300 are granted to the messengers and other establishment, so that the lands rented will be about 6900; but some of this being newly taken into cultivation, and paying a low rent, we may take the rented land at 6400 bigahs, which at the rate above mentioned (from 6 to 12 annas a bigah) should give a gross rental of 3600 R. besides the payment of the messengers who receive land. As the estate is now the property of the Company, and as most of the Invalid land, and the whole of the Ghatwali is unoccupied, and belongs to the State, I would earnestly recommend, that whenever the agreement of the farmer has terminated, at which time also the leases will expire, the whole should be placed under the management of a steward, that the rent should be raised on leases for life, to from 16 to 24 annas a bigah, according to the quality of the soil, and no allowance made to new settlers, in which case I have no doubt, that a gradual amendment would take place, and continue, until the whole was occupied, and might readily give a revenue of 30,000R.

3. Pergunah Chhai (Chihy, Glad), forms a fine estate on the north side of the Ganges, where it occupies almost the whole of the extensive division of Lokmanpur, and a small portion of Kumurgunj.

The land here is measured by a pole applied to the ground, and in some places is 120 cubits, in others only 110 cubits square. The cubits also differ, some of them being 18 inches, others containing  $\frac{2}{7}$  more; but in the most common the pole is of  $5\frac{1}{2}$  long cubits; there being 20 poles square to each bigah, so that this contains 45,050 feet, or is a little more than an English acre, or than  $3\frac{1}{2}$  bigahs of the Calcutta measure,

The original settlement was made by the Collector of Bhagalpur ; but, soon after, this Pergunah was transferred to Tirahut; and, during the time it continued annexed to that district, the Collector required of the Zemindars an account of the measurement of their lands. The return made was by conjecture, and included free lands, Seapoys' Jaygir, marshes, barren lands, sands, &c &c. According to the statements made by the different Zemindars of these returns, all of which they were eager to show, the total amount is 325,600 customary Bigahs. Taking these at the above size, the amount will be 10,20,000 bigahs Calcutta measure. My conjecture, from the size of the Pergunah on the map, gives 9,79,000, a very near coincidence, and the difference may be readily accounted for by supposing that many of the customary bigahs are smaller than the above mentioned standard. I have estimated, that of the whole, about 8,72,000 Calcutta bigahs are fit for cultivation, and that about 6,54,000 are actually occupied, and this proportion was the result of the general average of cultivation estimated by the officers of police and the most intelligent of the people employed by the Zemindars, compared with what I saw in travelling through the Pergunah. When, however, I came to compare the particular statements made by each landlord (copies, I believe, of what had been transmitted to the Collector) I found a wide difference, and of 302,829 customary bigahs belonging to Zemindars, concerning which obtained particular reports, it was stated that only 105,424 were cultivated. The most common pretence is that the whole has been swept away by the river. The soil is indeed much lighter and more liable to injury from floods, than the southern bank of the river, but on the whole is of a tolerable quality.

In the time of Hoseyn Shah, king of Bengal, to whom this part of the country was subject, Chhai was divided among a great many petty Zemindars, under the management of a Tahsildar or steward, to whom a certain Rajput named Yasamanta, was appointed Jumadar, or commander of his guard. Some years afterwards, the concern being profitable, this man purchased 13 (Mauzas) manors from various owners, and took the title of Khan, which, although a Tartar word, is now assumed by many Hindus

of rank, and even by Brahmans. At that time there was another Yasamanta residing at Dharhara in Tirahut, who being a notorious robber, seized on some treasure belonging to the king, who being enraged sent his son to punish the offender. This young man giving himself little trouble in the difficult investigations of the law, and having heard that the robbery had been committed by a certain Yasamanta, took the Jumadar, who happened to be the first person of the name that he found, put him to death and burnt his house. During the execution a faithful female slave concealed the two sons of Yasamanta, and when the danger was over carried them to Gaur, and presenting them to the king, demanded justice. The king having investigated the matter, found that his son had been guilty, and ordered that he should be delivered to Krishna Das, the eldest son of Yasamanta. The prince's mother applied to this Rajput, and procured her son's pardon, bestowing in return the Zemindary of the whole of Pergunah Chhai, except Tappa Dira, which was left to the ancient proprietor to whom I shall again return; and in the meantime I shall confine myself to the lands granted to the Rajput.

When Krishna Das and his brother Prayag Ray, the sons of Yasamanta, grew up, they disputed concerning the succession, and, the matter having been referred to the arbitration of Barisal, a Rajput Zemindar of Tirhut, he determined that the new acquisitions should go to Krishna, and the 13 Mauzas first purchased to the younger brother.

Krishna left two sons, Maha Ray and Haridev Ray. The former was Raja for life; but, although he had sons, he was succeeded by Narendra, the son of his brother, in the following manner. The Subah of Patna could not take a fortress called Singhalgar; but having heard of Narendra's reputation in war, appointed him to command the troops and the place soon after was taken. The Subah gave him the title of Raja, and the whole of his uncle's estate, which was confirmed by the Punjab (a kind of seal) of the king. The son of Maha Ray, named Gaurnarayan, obtained one Mauza as an appanage, and it still belongs to his descendants. Narendra Raja had four brothers, and each of these received a similar

appanage, (Melk), holding as usual of the chief for a small rent fixed in perpetuity. The first Raja left two sons, Prawal who succeeded him, and Surath Singha, who received five Mauzas as an appanage. Prawal, the second Raja had five sons. First Dev Singha, 2nd Darpan, 3rd Khosal, 4th Hira, 5th Gyangn. The four younger received each one Mauza, and Dev Singha became third Raja. He was succeeded by Raja Kirat Sangha, the son of Vishnu, son of Dev Singha. Kirat was the fourth Raja and having no son adopted Krishna, the great grandson of Darpan, the second son of the second Raja. Krishna the fifth Raja died lately, leaving three sons, Madanmohan, Brajabhusan, and Sivprasad, all good looking polite young men. None of the family studies Persian, since one of them died young, while engaged in that study. The young men are great hunters, but the expense of their father's funeral, and the loss of their house by fire, rendered their abode, when I visited them, unworthy of their rank. The eldest brother is called Raja, and is considered as proprietor of all the estate that remains, but it has been exceedingly reduced by the numerous appanages granted to younger branches of the family, by various feus granted to former dependants, all of whom have now been rendered completely independent, and also by various sales ; but the Raja is now 28 years of age, and is considered as very attentive to business. The second brother has given up all claim to succession, having been adopted by Ebadut Singha, of a collateral branch, that has acquired, partly by succession, partly by purchase, a very considerable estate.

The descendants also of Prayag, the younger son of Yasamanta, injured their estate by frequent grants of appanages to younger branches of their family, and to favourite servants, until at last in the Fusli year 1190 (A. D. 1783) Harinarayan, alias Jhabban Singha, and Ajit Singha, two cousins then in possession, were under the necessity of selling the remainder ; but the persons who had free lands on their estates, probably in consideration of some collusion of defraud government, allow him to take 2 anas on each bigha of their land, that is cultivated.

A good many of the descendants of the family retain their appanages, among whom is Duriya Singha, the representative of Maha Ray, the proper head of the family, who was dispossessed by the warlike Narendra, as above mentioned. A vast number of new men have also intruded, whom it will be needless to specify, and the greater part are Rajputs, but the Kanungoe, or register of the Pergunah, a crafty scribe, as usual, has secured some, and Dular Singha of Puraniya, often already mentioned, has purchased a part. On the whole, in the public record it is divided into 50 lots, besides 5 fisheries, and to this division the same remarks, made in the account of the preceding Pergunahs, are entirely applicable.

This part of the Pergunah, I reckon, contains about 6,41,000 Calcutta bigahs of arable land, of which about 5,28,000 may be occupied. But the registered free lands in the whole being 23,956 bigahs, of which about 500 only are stated to be in the other portion, there will remain here about 58,376 of the Calcutta measure. Then 29,914 bigahs 5 kathas belong to the Invalid establishment, all the property of the Company. This amounting to 56,700 Calcutta bigahs, there will remain about 5,26,000 arable bigahs. The whole assessment is 57792 R. 14 A. 12 G. 1 K. from which deducting 335 R. 1 A. 15 G. for fisheries, there will remain R. 57,457, or one Rupee for a little more than 9 (9.15) bigahs Calcutta measure. Allowing that the free and invalid land is as well cultivated as the assessed, which however would not appear to be the case, the Zemindars' share of the occupied land will be rather more than 4,33,000 bigahs, for which they are assessed at the rate of 1 rupee for rather more than  $7\frac{1}{2}$  (7.54) bigahs Calcutta measure.

The following statements referring to the Raja's estate, still the most considerable, will show how the lands are here managed. On the north side of the Ghagri river, the land that is let by a division of crops, is measured by a rod of  $6\frac{1}{2}$  common cubits; while that used on land let for a money rent is only 6 cubits; on the south side of the Ghagri six manors have a rod of  $5\frac{1}{2}$  great cubits, and nine Mauzas one of 6 cubits of the

same kind. The tenants have leases for from 2 to 5 years, at the end of which a new bargain is made. No mention of extent or amount of rent is made, the rate alone is specified, and what is actually cultivated pays according to this rate, either party being at liberty to measure; but some is let by a division of the crop. The rates north from the Ghagri are as follows:—

Customary Bigah.      Calcutta Bigah.

Rs. as.

Rice or 2 crop land ..	1	4	A. 8	$17\frac{3}{4}$	G. or 1/20
Wheat ..	1	2		8	0
Barley ..	0	10		4	$8\frac{3}{4}$
China ..	0	12		5	$6\frac{1}{2}$
Arhar ..	0	8		3	11
Mustard, etc. ..	1	0		7	$2\frac{1}{4}$
Twining pulses sown among mud.	0	4		1	$15\frac{1}{2}$
Pulse sown among stubble.	0	3		1	$6\frac{1}{2}$

The high castes are allowed a deduction of from 1 to 2 anas on the rupee, and new settlers for the first year are allowed very large deductions. Last year it was said, that according to actual measurement not quite one half was cultivated; but, although I must allow, that most of the winter rice on the higher lands was not transplanted, I have no doubt, that more was occupied. The Zemindar, however, such a manner of letting his estate, is liable to great frauds, and this may be all that was brought to account. Even at this rate, 27,345 bigahs produced 29,199 R. Taking into consideration the different sizes of the bigahs in different parts of the estate, most of which is on the north side of the Ghagri, the cultivated land might have been about 67,000 Calcutta bigahs, so that the gross rent is at about the rate of rather less than 7 (6.973) anas a Calcutta bigah. Had the rice land been fully occupied, as it is the most valuable crop, the rate would probably have risen to 8 anas. Taking however the actual rate

stated by the Raja, the 521,000 bighas actually occupied would give a gross rental of 227,000R; rejecting hundreds, and deducting ten per cent. for the fair expense of collection and the revenue, there will remain 149,700 R. nett profit. When the rice crops fail, as this year, a great deduction must be made; on the whole Pergunah indeed this deduction would be moderate, but on the Raja, who has much of that kind of land, it fell heavy. In most years however his profits will be great. This year he only admits of a profit of 2000 R. on assessment of 16,000 R. To show the fallacy of such accounts I give his statement:—

	R. A. G.
Gross revenue .. ..	29,198 12 10
Village establishment .. 3,047 2 12½	
Chief office establishment 3,005 10 0	
Expense of collection .. 7,052 12 12½	
Zemindar's commission 4,654 11 0	
Revenue 16,044 15 10	
Batta given to Collector 401 4 0	
Profits .. R. 2,045 1 7½	

Now on this statement I must observe—

*1st.*—The whole village establishment, in fact, is as follows:—24 Patwaris or clerks, who are allowed  $\frac{1}{2}$  ana on the rupee of money rent; 22 Gorayits or messengers, who get  $1/8$  of an ana on the rent of 2-crop land or rice fields, and a Chuklahdar, who gets  $1/8$  of an ana on the rupee of the whole. In all  $6/8$  of an ana on the rupee of perhaps  $2/10$  of the rental. These persons receive other allowances, but these are paid by the tenant, as are also the Baniyas or weighers of grain, and valuers of money. In place of amounting to 3,047 R. these charges should not exceed 1370 R. even allowing that the whole rental paid the commission. The expense of the chief establishment

should be nearly in the same proportion. Five per cent for each, being an ample allowance.

*2dly.* — The Zemindar's commission ought to be equal to  $1/11$  of the rental, and should be therefore 2654R in place of 4654R. The fact would seem to be that, when the accounts were formerly given in to the Collector, the rice land having been cultivated as usual, the commissions amounts to the sums here stated, and have been continued ever since on the books, from whence we may conjecture the real profit and extent of cultivation on this estate, which will agree tolerably with the general estimates that I have given. But whatever the Zemindar's commission may be, it is a clear profit to the Raja.

*3dly.* — The charge of Batta, or for light money, is absurd; for, although he probably paid what is here stated on the 16,000 Rupees of revenue, there can be no doubt that he collected at least as much on the gross money rental, and in all his expenses, except revenue, the rupees, such as he receives them, pass current, so that in fact a profit should have been added on account of Batta.

*Finally,* three whole manors (Mauzas) out of the 87, that he possesses, he considers as his private property, and their revenue he has not brought into the account, although they are not registered and would be sold with the estate, were he to be in arrears of revenue.

The Raja has farmed the rents of only a very small part of his estate and seems to be a good master.

The other estates in this portion of the Pergunah are managed much in the same manner, only the normal rate of rent varies according to the size of the bigah.

I now proceed to treat of the other portion of the Pergunah, which in the country is called Tappa Dira, as it is everywhere low land surrounded by branches of the Ganges; but in the public registers it is called Vikram-pur, Chakrami, etc.; for in this district it is rather uncommon to find coincidence between any two authorities for the names of places or things. The family to whom

it now belongs held their possessions before the arrival of the Rajputs, and were probably too strong to be expelled. They are of the Kharwar caste, and Haris Chaudhuri, their ancestor, came from Khayragar in Nagpur; but how he procured possession is not known. He was succeeded in regular descent from father to son by Bibek, Bhairav, Lochan, Kshem, Lakshminath, Nehalchandra, Dayanath, Harihar, and Avadhut, who had two wives. Amarawati, one of them, had two sons Kaleswar and Zalem, who now possess the estate in common. Kaleswar, when I saw him, was a good looking lad about 15 years of age. On her husband's death Amarawati managed the estate for eight years. On her death the other widow, Durgawati, who had no children, took the management, but it is alleged that she did not conduct herself with propriety, and the Collector appointed a manager to take care of the property for the minors.

The total land, when the official report was made to the Collector of Tirhut, was 74,000 bigahs; but this was by conjecture, and wishing to be on the moderate side, I have taken these bigahs at the lowest customary rate of the estate, which is  $3\frac{1}{8}$  of the Calcutta measure, but in some parts of the estate a bigah is in use, that equals  $3\frac{3}{4}$  of the latter. This estimate will give 231,000 bigahs of the Calcutta measure. The estate is only burthened with 500 bigahs of free land, equal to 15 or 16 hundred of the Calcutta measure; so that there will remain to the family above 2,29,000 bigahs, all arable. It is true, that in the original measurement marshes, creeks, barren lands, etc. were included; but the estate has since gained very considerable acquisitions from the river. The assessment is Rupees 14,459, 14 anas so that the Zemindar for each rupee has  $15\frac{3}{4}$  (15.83) bigahs Calcutta measure. Besides 100 bigahs customary measure, which is given in part payment of the village establishment, the agent allows that there was last year cultivated 20,657 bigahs 14 kathas about 1/13 of which are of the largest kind, which will give about 67,487 bigahs Calcutta measure, or not a third of the estate. Although the low assessment has no doubt very much retarded cultivation, yet so far as I could learn or see, about a half

of the whole is now occupied, amounting to about 1,14,000 Calcutta bigahs. The agent's account is indeed incredible, as he contends that more than a half of the estate has been destroyed by the river, while, as I have said, it has from that source derived considerable additions.

The leases are in general granted from about 2 to 5 years, and a new bargain is made on the renewal. A few of them are called Mokurruri, that is the amount of the rent is stated, and the tenant cultivates as he pleases; but in by far the greater part, they are Halhaseli, and specify neither extent nor amount of rent; only what is cultivated pays, and the amount of the rent is ascertained according to a rate mentioned in the lease; but 5/8 of the land pay by a division of crops, and this, after deducting everything in favour of the tenant, and the amount of frauds, will give about 1 Rupee a Calcutta bigah. The rates for money rent vary from 2 R. to 4 anas a customary bigah, according to six qualities, but by far the greater part is of the first quality, and is let at 2 R. or about  $10\frac{1}{4}$  anas Calcutta measure; but 8 anas may be taken as the average. At these rates the 67,000 bigahs, which the Zemindar allows would give a gross rental of 54,437.8 R.; deducting expense of collection (1/10) and assessement there would remain a profit of above 34,000 R.; but according to my estimate, the gross rental should be 92,685 Rupees, leaving a nett profit of above 68,000 R. capable of being almost doubled by bringing the whole into cultivation.

4. Pergunah Pharkiya (Phurkyeh Glad.) is an estate of very great extent, occupying the greater part of the enormous jurisdiction of Gogri. So far as I can learn, it never belonged to any one family, although a claim of that kind has been attempted to be established. I shall now however trace the different owners.

Some time ago two Rajputs named Asa and Chanda came into this part of the country from Chitrakut in Bundelkhand, and seem to have destroyed a Bahor who held Tappa Bhorsa, and a Goyala who held Sehazari, and seized on their estates. According to the family traditions, Assa's son Jaminibhanu succeeded, and his son Chuhar Ray possessed these new acquisitions;

but having no son, left them to Udaybhanu the son of his grand uncle Chanda. This person left two sons, Hem and Jay, both called Narayans. The elder received an investiture from the king, having formerly held his lands by mere usurpation or violence; while Jay, the younger brother, received a small appanage. Hem was succeeded by his son Ramnararyan, who was followed by his son Baidyanath, who left three sons, Bukhtawar, Basawan, and Bhawani Singha. Bukhtawar was succeeded by his son Manggal, now alive; Basawan is still living; Bhawani is dead, but has left four sons, Jhabban, Vishnu, Omrao, and Chandidatta, who possess in common with their kinsman Manggal; but Basawan has purchased in his own name some lands that were sold by the other branch of the family, now to be mentioned.

I now return to Jaynarayan, the younger son of Udhaybhanu, the son of the adventurer Chanda. He left a son named Gauri, who, being poor, entered into the service of a Chandal, who was owner of the greatest estates in Pharkiya. This low fellow, being of a very violent temper, offended the pride of the Rajput, who, according to his descendants, revenged the insult in a manner, which they tell as a clever action. The Rajput offered a beautiful damsel of his own tribe in marriage to his master, who being delighted at the honour joyfully accepted the offer, and came to the marriage feast with all his kinsmen and armed adherents, to the whole of whom poison was administered, and then the Rajputs rose put to death all the wives and children of the Chandals, and seized on the property; after which ensued the state of anarchy and murder, which I have mentioned in the topography. Gauri left two sons. The eldest, Kungjal, left a son Dukhbhanjan, who had three sons, Futeh, Buniyad, and Mahipati Singhas, who are still alive, but have sold almost the whole of their patrimony. The second son of the clever Gauri was Narayan Singha, who, being like his father an active valorous man, without any sort of scruples, was considered as the head of the family. At this time Ezzut Khan came as an Amel from the Moguls, and all the Zemindars, except Narayan, visited him, and made the

usual presents. The Mogul, however, found means to seize the refractory Rajput, and taking him to the monument of a saint, offered him as a sacrifice (Zubeh) by cutting his throat. This so terrified the Rajputs, that for a little there was a peace; but Ezzut Khan was assassinated by Bhawani Singha, a Rajput of another family, who seized on the government. Narayan, who had been sacrificed, left a son Haradatta, who possessed all the qualities of his father, and was considered as the chief of the family. He had retired for some time to Kharakpur, but having made peace with the new Mogul officer, he returned, and put Bhawani to death; and his descendants allege, that all the Zemindars of Pharkiya acknowledged him as their chief. He died very lately without any children, and was succeeded by his widow, who appointed Buniyad, the son of her husband's cousin to be her manager; but extravagance has compelled them to sell the whole of their possessions, amounting to a very considerable portion of the whole Pergunah, to Dular Singha of Puraniya, often before mentioned.

Murari Saha, a Rajput from Singharat in the west of India, with his brother Zorawar Saha, came to Godana Majhi near Banaras. The latter became a Moslem, and settled there, while his brother came to Chautham in this Pergunah, for which, as the family pretends, he obtained a grant from the king. He was succeeded by his son Rajaram Saha, who left two sons, Bhawal and Hira Saha. The former succeeded to the whole estate, and left six sons, the eldest of whom, Vir Saha, succeeded to the whole. The other brothers were Kshemkarna, Rupan, Chatur, Sital, and Hatem, all called Saha, Vir left the estate to his only son Chandras. He left four sons, and was succeeded in the whole estate by Kshemnarayan, the eldest. The others were Lakshmiram, Mahaku, and Mahaval. Kshem, having no son, was succeeded by Kanak, the son of Lakshmiram, who had no son, and was succeeded by Manggal, the son of Mahaval. Manggal also died without son, and was succeeded by Manorath, the eldest son of his brother Mohan Singha. Manorath mortgaged (Katkubalah) his estate, that is to say, he borrowed a sum of money from a Zemindar in Tirhut, who took the estate as a

security, engaging to restore it, if the money was repaid by a certain time. This time having elapsed, Manorath's title became extinct, and the mortgagee sold the estate to Srinarayan, Govinda, and Pahulwan, the three brothers of Manorath. This was probably a mere trick to save the estate by defrauding the creditors of Manorath. The estate is very large, but in a wretched condition, and the family is of course very poor, and has been repeatedly saved from utter destruction by an indigo planter, who has besides brought a little into cultivation, otherwise the whole was in danger of being totally deserted. The house never was fit for a person of any rank, and when I visited the place was very ruinous, while everything about the brothers bespoke poverty; yet they had collected provisions to entertain my whole followers. When I declined this mark of cavility, the eldest brother declared that the family would be for ever disgraced, and in order to procure my consent attempted to fall on his knees; but being a very corpulent man, and slow in his motions, he was prevented, and his brothers, convinced of the idleness of such pride, took him away.

This family must have possessed the estate before the success of Gauri, the descendant of Chanda, and the brothers deny that they were ever vassals of either these Rajputs, or of their predecessors the Chandals: but the descendants of Chanda assert their superiority, and their violence, perfidy, and courage, in all probability, made them highly respected.

The largest estate of the Pergunah, called Tappa Haveli, belonged to Uday Singha a Rajput, whose ancestors had possessed it for several generations from the time of Lakshman and Kastur, two brothers, who obtained it long before the time of Gauri. In the Fusli year 1171 (A. D. 1764) Uday sold by far the greatest part of this estate to Raghunath Singha, a military Brahman (Bhungiyar), who left it to his son Sivanath, who has left four sons, that possess it in common, under the management of Viswanath the eldest. This portion of the estate is now called Haveli Bhadas. The remainder of Haveli, still a pretty considerable estate, belongs to the original Rajputs. I have not been able to trace

their genealogy, and the family has divided into three branches, represented by Omrao Haramohan, and Tribhuvan with four of his kinsmen. The share of Omrao is by far the largest, and is still a respectable property.

Chhatri Singha, a Rajput, enjoyed a large estate in Pharkiya, in which he was succeeded by his son Jagat, and his grandson Than. This person had two sons Amar and Prithwi. The former obtained Tappa Sarongjangja, which has now subdivided into 9 lots, but mostly belonging to his descendants. He left three sons. 1st, Vir obtained one portion, and left it to his son Ajit, whose son Talebur now holds a very handsome property. 2nd Khosal son of Amar obtained about an equal share, and was succeeded by Doman, who has left four sons, Bukshi, Badal, Mahesdatta, and Bhola, who enjoy their patrimony in common. 3rd, Duniya the son of Amar, left three sons, that divided that patrimony. 1st, Raju, who has left two sons, Raghubar and Cheta, that now are in possession of their father's share; 2nd, Bukhtawar, who died without sons, but left his patrimony to Bhupati the second son of his younger brother Durgahi; 3rd, this Durgahi left two other sons, Baidyanath and Dattanarayan, who have divided their father's share. Prithwi the second son of Than, obtained Tappa Parari, a considerable estate, which has not divided, and has came in regular succession to Budhan, Nawal, and Brahmadatta, the present owner.

Two moslems, named Chand and Alauddin, possessed Tappa Sulemabad of Pergunah Baliya, immediately west from Pharkiya. Chand left four sons, 1st Neyamut, 2nd Abdulhakim, 3rd Muhammedhafez, and 4th Doulut. The second of these taught a son of one of the kings to read, and procured the title of Khan with three baronies (Tappas) of Pharkiya, namely Kachauyat, Simri, and Hamidpur. The grant is said to have been dated in the Fusli year 981 (A. D. 1574). Neyamut remained on the paternal inheritance, Abdulhakim remained at Dilli, and sent Hafez and Doulutto to take possession of the new estate. Hafez seems to have obtained Kachauyat and Hamidpur, and was succeeded in regular descent by Fazel Afzal, Amurullah, Muhammed Azum, Imambuksh, and Sheyakh Ashukmuhammed, who still enjoys a very pretty

estate, a portion of Tappa Kachauyat ; but about a third of that territory is divided into three lots among Hindus, who have probably obtained it by purchase. Muhammed Azum, grandfather of the present head of the family, was forcibly deprived of Humidpur by Manorath Singha, the foreocious descendant of the treacherous Gauri ; but it, along with all his other ill-gotton possessions, has been sold.

The greater part of Simri, the other portion of the estate given to the preceptor of the king's son, went to Furid, son of Allauddin, brother of Chand, the preceptor's father. Furid was succeeded by Abdulrusid, Janmuhammed, and Lotfullah. It is alleged, that, this person being a boy, his agent, Sheykh Asa, procured by false representations a grant of his young master's property for his nephew Hedatullah, whose grandson or great-grandson now possesses the greater part of Simri, and has purchased a part of Humidpur, so that he is now the third proprietor in the Pergunah. A small portion of the Simri was given to Doulut the youngest brother of the preceptor, and still remains with his descendants Neyamutullah, Golam Nuzuf, and Din Muhammed ; but I have not been able to trace their genealogy. Sheykh Ashuk and Muhammed Ali, the chief of these Moslem Zemindars, are very intelligent and polite men, but do not seem to manage their estates with prudence. They say that ever since the perpetual settlement, the cultivation has been on the decrease, notwithstanding that the country has enjoyed undisturbed peace, and for many years before had been a constant scene of turbulence, treachery, and bloodshed.

The Zemindars of this district pretend that they annually give a return of their lands, and their condition, to the Collector ; but they are probably mistaken, as that gentleman knew of no such paper in his office. It may however have escaped his notice, as being of no use, and I am persuaded of very little authority. The Zemindars say that when the temporary transfer of the Pergunah was made to Tirhut, the Collector there called on them for a statement of their lands, which they gave by conjecture, and this statement is continued in the reports, which they annually make. I procured the

general result of these reports from by far the greater part of the Zemindars, by which it was stated, that the total extent of their possessions amounted to 5,96,288 bigas customary measure; but as an account of some few petty estates was not procured, the amount will be about 600,000 bigas. The most common customary bighas, as measured by a pole 6 cubits long, each cubit being  $1 \frac{1}{7}$  cubit of the common standard, and 20 poles square make the bigah, which therefore contains 42,230 square feet, but there is another bigah in use which, consisting of  $6\frac{1}{2}$  common cubits, contains only 38,025 sq. ft. Allowing  $\frac{3}{4}$  of the bigahs to be of the former extent, and  $\frac{1}{4}$  of the latter, the contents of the Pergunah would be 17,15,000 bigahs Calcutta measure; but so far as I can judge from the map, the whole Pergunah contains about 14,96,000 bigahs. Such a difference can only be accounted for by supposing, that the Zemindars thought it safest in their conjecture to err on the large side, lest, if they claimed little, and a measurement had taken place, they should have lost: but they make an apparent statement of poverty, by writing down great quantities of land as destroyed by the river, as sandy, barren, and entitled to every opprobrious title that could be contrived, so that there remains very little fit for cultivation. The rivers, water etc. they allege amount to  $1/3$  of the whole, which appears to me quite absurd. So far as I could judge the rivers and mere sandy channels may amount to about 45 square miles or 86,400 bigahs, and there may be 105 square miles of a light sandy soil, in most places however not absolutely unfit for some crops, and all producing reeds or pasture. This gives 2,01,600 bigahs Calcutta measure, and deducting both and taking the extent at my calculation, there will remain of excellent arable land 12,08,000 bigahs. The whole free land, that is registered, amount to 6824 bigahs which may be 19,500 of the Calcutta measure. More is indeed claimed, as it was said that the old register (Kanungoe) actually possesses 17,800; but he only acknowledged 12,800, or nearly double of what actually belongs to the 382 persons, who are entitled to hold such lands. Allowing that the whole of the free land is of a good soil, it will reduce the Zemindars' possessions to

11,88,500, but it is very probable that the register may actually possess the 17,800, and that others may possess more than is their due; for the Zemindars allege, that in all there is almost 24,000 bigahs of free land, equal to about 68,000 of the Calcutta measure, which would reduce their lands to 11,40,000 bigahs. Farther the Invalid establishment possesses in this Pergunah 22,731 bigahs 5 kathas of which 18,045 belong to the State; but hitherto the Zemindars have benefited little by the remainder. The whole, amounting to almost 43,000 bigahs, and allowing it to be all good, will reduce the Zemindars' arable lands to 10,97,000 Calcutta bigahs. Allowing no value to be put upon fisheries, pasturage, reeds, etc., the assessment amounting to R. 50,940-4-15½ for each rupee they have of good arable land, making every possible deduction, rather more than 21½ (21·53) Calcutta bigahs, to which may be attributed a great part of the poverty, under which some of them and their people labour. In general, however, they pretend to labour under greater poverty than is actually the case, and of course complain of the assessment. In their right, it is said, that they have conveyed to them the Chaka Makhana, that is a right of levying a rent on such as collect certain water plants. As they levy no such rent, they expect a deduction of assessment.

A vast tract in the centre of the country is possessed by the old register, who pays nothing, and by the Chautham family, which pays 1977 Rupees a year. This territory, said to contain above 64,000 customary bigahs or 1,84,000 of the Calcutta standard, and from its appearance I should think that it probably contained more, is almost totally waste, and will reduce the average rate for what the other Zemindars possess, some of which is in a tolerable state.

So far as I could judge, both from what I saw, and from general statements made by intelligent agents of Zemindars and others, about 384 sq. miles might be occupied. This amounts to 7,37,300 bigahs, and the share belonging to the Zemindars will be about 6,69,500 bighas, that is to say they have cultivated about 55 per cent of their good arable land, or 43 per cent of their whole estate; but according to the Zemindars, who

gave me returns of their land, out of 5,70,561 bigahs customary measure, only 66,335 are rented, which is little more than  $11\frac{1}{2}$  per cent of the whole, or about  $\frac{1}{4}$  of the proportion that I have stated. I must however allow, that it is the portion of Dular Singha alone which is in a good state. In my account of the natural productions I have had occasion to praise his activity in destroying the wild animals by which the Pergunah was infested, and in my account of Puruniya I have applauded his management. Were the whole Pergunah his, I have no doubt that in 20 years it would be fully occupied.

No rate, it is said, has been fixed for the land by Government, and the leases are short, from 3-10 years. Scarcely any are in perpetuity at a low rent (Estemurar). The leases do not mention extent nor amount of rent; for the tenants only pay for what they actually cultivate, and each individual has not a lease. When an estate is to be let, the tenants are assembled, and the rates having been agreed upon, a lease is given to some principal persons, with an etc., saying that the lands of such and such villages have been granted to them for such a number of years at such rates. Most of the rent is paid in money, and large deductions (Khil, Kanhil), as usual, are made to new settlers. Rice land, tobacco, cotton, and 2-crop land in the southern best occupied parts, pay from 8 to 32 anas a customary bigah. One crop land pays from 8 to 12 anas, with a deduction of one Katha a bigah, or  $1/20$  part. The former is at the rate of from 2 Anas 12 Gandas to 10 Anas  $7\frac{3}{4}$  Gandas the Calcutta bigah, the latter is at the rate of from 2 A. 12 G. to 3 A.  $17\frac{3}{4}$  G. In the middle wretched parts there is only one rate for all land, except tobacco, and this varies according to soil from 4 to 24 anas a bigah, or at the rate of from 1 A. 6 G. to 6 A.  $16\frac{1}{2}$  G. for one of the Calcutta measure. Tobacco pays from 12 to 40 anas, or from 3 A.  $17\frac{3}{4}$  G. to 12 A.  $19\frac{3}{4}$  G. for the Calcutta measure. In the northern rice country the rent for tobacco are from 24—56 anas, for cotton from 3 to 16 anas, and for grain from 3 to 24 anas, without any deduction. These rates by the Calcutta bigah are from 8 A.  $3\frac{1}{2}$  G. to 19 A. 4 G.; from 1 A.  $0\frac{1}{2}$  G. to 5 A. 9 G. and from 1 A.  $0\frac{1}{2}$  G. to 8 A.  $3\frac{1}{2}$  G. A great

part of the misery of the country must be attributed to those low rents, which have sunk the tenantry into a helpless indolence.

5. By far the largest estate in the district, is that of the Kharakpur Raja, which in the family records is usually called Mahalat Kharokpur, and is irregularly divided into Pergunahs, Tappas, and Mauzas, and occupies the whole of Tarapur, a great portion of Bangka and Mallepur, with some parts of Suryagarha, Lakardewani, Kumurgunj, Gograi, and Ratnagunj. It seems to include Pergunahs Ocsela, Chundowey, Dandsukhwar, Serowhy, Kehrhy, Kowzreh, Lakhnpoor, Mussdy, Hendowy, and Bellya of Mr. Gladwin's translation of the Ayeen Akbery, which according to the orthography I have adopted are written Osla, Chandwe, Dangra Sakhwara, Seharul, Kherahi, Kajra, Lakshmanpur, Masdi, Hangrwe, and Bal ya; but many new subdivisions have taken place.

I have already mentioned, that this current in his family, which, as I have said, differ from those of the Kshetauris, are as follows.

Three brothers, Dandu, Vasudev, and Babu Mahindra, of the Kinawar tribe of Rajputs, and sons of a Singhal Ray, came from their paternal abode at Sibirat, in Pergunah Saruyar, in the west of India, and settled at Masdi, near Kumurgunj. Being soldiers of fortune, they took service and became very great favourites with Sasangka, the Kshetauri Raja of Kharakpur. During a friendly intercourse, they had an opportunity of perceiving how his house might be attacked; and on the night of the 7th of Aghan, of the Fusli year 910, (A. D. 1503), having collected a band of Rajputs, they suddenly attacked the house and put the Raja to death. Dandu immediately proclaimed himself Raja by beat of drum, and from time to time destroyed 51 petty Kshetauri chiefs, who had depended on Sasangka, and seized on their estates. This is said to have been in the reign of Ibrahim, king of Dilli, when affairs were in great confusion; but it must be observed that in the inscription at Madhusudan, mentioned in the account of Mandar, the son of Vasudev is stated to have been alive in 1599, which is

scarcely reconcilable with so early a date for these events. The date of the inscription is farther confirmed by the accounts of the remaining Kshetauris, which have been mentioned in my account of Parsanda and Barkop. Dandu left his conquests to his son Rup Sahi, who had two sons, Sanggram Sahi and Narendra Ray. The former succeeded in the year 946 (A. D. 1549), during the reign of Akbur, who hearing that in these parts there was a Raja of great pride, who would not pay a tribute, ordered Jahangirkuli, the Subah of Patna, to destroy the rebel. On this service the Subah employed an officer named Bajbahadur, who for some months attempted in vain to force the Raja's entrenchments, at the mouth of the recess in the mountains called Mark Kol. He then gave 1,000 R. to one of the Raja's soldiers, who, in the Fusli year 1008 (A. D. 1601), assassinated his master. The widow, Rani Chandrajoti, and her son, Toralmal, held out the stronghold for six months, when both sides being tired of war, peace was made; and, on the kind promises of the Muhammadan officer, the family consented to visit Dilli where Toralmal was immediately thrown into prison. These transactions give no high idea of either the vigour or regularity of the Mogul government, during its highest perfection, in the end of the reign of Akbar. Jahangir having released Toralmal, appointed him a Morchulburdar, or person who fans the king with peacocks feathers. During the course of his attendance, being on a hunting party with the king, he attacked a tiger sword in hand and put the beast to death; on which occasion the king was so well pleased, that he raised him to the rank of an Omra, and converted him and his three sons to the faith in Muhammed. The Raja then took the name of Rozafzun, and was betrothed to a daughter of Bajbahadur, the officer by whom his father had been assassinated. The young lady, however, considered this marriage as highly degrading, and would not admit the Raja, to her bed. His mother was highly indignant at such an affront offered to her son; and, complaining to the king, the Raja was honoured with a less haughty but more illustrious bride, as she was daughter of Moradbukhsh,

the king's uncle. The Raja, on this occasion, obtained the command of 3000 horses for himself, and of 1000 for each of his two eldest sons. The youngest became a Fakir, and obtained two Mauzas of free land (about 4040 bigahs), which has reverted to the family. The whole of Pergunahs Haveli and Kajra, parts of Kharakpur, were settled on the Raja free of rent, the former for Sanak, or table expense, the other as Eltumga, or a gift. A Mauza also was fixed upon the family as Jaygir, and various commissions were granted to them on the amount of the assessment. These commissions were Zemindar's Rusum (two anas on the rupee), Melkiut, Chanda, Kanungoe, Nukudi, and Nankar. The Raja considers the whole of these as completely separated from the Zemindary, and as his property, were the lands to be sold for arrears of revenue ; and the Jaygir Eltumga and Sanak are no doubt entered in the public records. The claim to the others is doubtful, as in all probability the Zemindar, when these grants were made accounted to the king for the whole proceeds, and was allowed the above commissions for his trouble and profit ; and of course his claim ceases when he no longer performs the office. The Raja, after obtaining these favours, was allowed to visit his estates, and his second son obtained the office of Mor-chulburdar. In the year 1038 (A. D. 1631), Raja Afzun died and was succeeded by his eldest son, Raja Behroz. His brother, Abdul Singha, having died, the Raja obtained his office, and, while he held it, distinguished himself in battle, and obtained some lands, called Chuklah Medanipur, in the Virbhumi district, which have been since lost. He was then appointed Sahur Nesham, or royal standard bearer, and returned to enjoy his estates. He had four sons, Tahuyar Singha, Hoseyn-kungyar, Bahurbur-kungyar and Kungyar-Garshayesth. The family seems still to have had a hankering after their original customs, as each of these sons took a Hindu title. Tahuyar succeeded his father, and had seven sons, Muhammed Robed, Bahurmund, Roushunbukht, Bulund-bukht, Kodrutullah, Asmutullah and Tahirullah. The eldest went to Dilli, and become sword bearer of Aurungzebe. He accompanied one of the king's sons on a hunting party and killed a wild buffalo sword in hand, on which

occasion he obtained a grant of the estate called Garhi ; but before he could take possession he died of the small-pox. He left two sons, Arjus, or Rozafzun the second, and Muhammedazum, or Abedsur. The eldest became Raja, and succeeded to his father's office in the year 1134, during the reign of Muhammed Shah. In 1141 (1734) he died, and left his estates to his son Mozuffur Ali ; but, owing to his youth, the management for seven years devolved on his uncle. When Mozuffur Ali grew up he entered into the service of Subahās of Bengal, who had then become independent, and served Mahabhatjung, Serajuddoulah, and Jafurali Khan. When Kasem Ali rose into power, he sent into Kharakpur a Tahasildar with 5000 men, to levy money, and the Raja retired to Ramgar, but was persuaded by Bauli, brother of the Subah, to come to Mungger, where he was thrown into prison. Soon after his family was caught and plundered ; but about this time, the English army advancing Kasem Ali retired to Patna, and in the confusion the Raja made his escape. On the restoration of Mir Jafur, a Muhammed Aziz, was sent into the country in command of the troops, and he plundered it. After him came a Mir Haydur Ali, who allowed the Raja no authority, and gave him no commission. At this time a Mr. Barber, if I understand the native pronunciation, was at Patna, and to him Mozuffur sent his son to complain. The gentlemen, having made inquiries, sent back the young man with an order, that the arrears of commission should be paid, and displaced the officer (Foujdar) who commanded in Kharakpur. When Shetab Ray obtained the management of the revenues of Behar, Abutaleb, the officer commanding in Kharakpur, lodged a complaint against the Raja, alleging that he was a turbulent bad man, on which account the Raja was again deprived of all authority, his house was plundered by the officer, and his family was thrown into prison ; but he effected his escape into the forest of Jagannathdev. The Raja now sent an agent to Murshedabad, and complained to Mozaffarjung, then the justice general (Foujdar) of the province, who issued orders to Shetab Ray that justice should be done. Accordingly, Fuzulai, the Raja's son, and the family were released ; and Abutaleb,

the officer who commanded in Kharakpur, was recalled. This wretch, knowing the fate that awaited him, took poison, and his whole wealth was secured by Shetab Ray, who restored nothing to the family, and sent another officer who allowed the Raja no more authority than the former had done. On this the Raja sent his son and Bholanath, his Dewan, with another complaint to Murshedabad ; but by the way they met Shetab Ray, who sent the son back and persuaded the Dewan to accompany him to Calcutta. The Raja, knowing by this that his Dewan had betrayed him, sent another agent to Calcutta, who gave security, and obtained an order that the management of the estate should be restored to the Raja. About this time the house of Prandatta, the Kanungoe, or register, was robbed, and the officer commanding immediately sent a charge against the Raja, as having been the perpetrator which his family of course deny ; but it was believed by Government, and a European subaltern, Mr. Clerk, with two companies of seapoys, was sent to protect the native officer (Tahutdar), who was appointed to manage. On this the Raja retired to the forests, but sent his son to meet the officer. When the young man came within a day's journey of the seapoys, some treacherous Ghatwals informed the officer that he had brought many men and intended to fight. On which the officer marched by night, and, surprising the party, put many to death ; but the Raja's son made his escape. Then Mohan Singha, a Rajput Ghatwal, informed Mr. Clerk where the Raja was concealed, and this officer, advancing suddenly, caught the Raja and sent him to Patna, where he was put in irons. In 1177 (A. D. 1770) he petitioned against the Ghatwals and native officer. They were called before Shetab Ray, their accusation declared groundless, and the Raja was released from prison, but ordered to remain at Patna.

In 1180 (A. D. 1773), when Captain Brooke was sent to quell the disorderly Ghatwals, he sent for Fuzulali, the Raja's son, gave him comfort, and endeavoured to reconcile him to Jagannathdev, then the most turbulent and powerful of the Ghatwali chiefs. Captain Brooke at the same time sent a representation of the case to Mr. Hastings, who recommended an investigation

to Mr. Law, chief at Patna. At this time Mozuffur died; but Mr. Law sent for Fuzulali, then Raja, gave him comfort, and was on the point of restoring him, when he was removed to Murshedabad, and Kharakpur was placed under Mr. Barton of Bhagalpur. Captain Browne, on taking command of the troops, then employed to bring this district into order, recommended Fuzulali to Mr. Barton, who then going to Calcutta, left him in charge of Madangopal Ray, his Dewan or native assistant. This man sent the Raja to Kharakpur with a certain Rudramohan, who was called the Raja's security but in fact managed everything as he pleased, gave the Raja nothing, and divided the profits between himself and the Dewan. Then the Raja complained again to Captain Browne, and Mr. Barton having returned, was informed by that officer of what had been done. Mr. Barton sent for the parties, but on the 24th of Magh 1183 (A. D. 1776) before any investigation took place the Raja died, his son Kader Ali having been born a few days before, and having received the mark of Raja Tika from Prasad Singha, who is the head of the family, and still a Hindu, who receives an annual allowance from the Raja. Rudramohan, the faithful security, informed Mr. Barton that the Raja had no son, and that the proper heir of the family was Mahusenali, a half-brother of Fuzulali's, and who, being an idiot, was a proper heir for a manager. Some time afterwards Mr. Barton found out his error, and in 1188 (A. D. 1781), Mr. Hastings issued an order (Purwanah), directing Kaderali to be put in possession. Such is the account given by the family. How far it is true I cannot say; but in the modern events there is nothing improbable. It is however very likely, that in the confusion which ensued during the overthrow of the Mogul government, Mozuffur might have refused payment of the revenue; such being the usual practice whenever there is a want of military force. Kaderali is a man of plain unaffected manners, but exceedingly obliging. His disposition is said to be mild and just, but he has been expensive, and is involved in pecuniary difficulties, in order to extricate himself from which he has farmed the rents of almost his whole estates to a man, who has advanced him large sums of money.

thus very great authority, and is said to abuse it by oppressing the tenants.

According to the space which Kharakpur occupies on the map, it contains about 47,69,000 bigahs Calcutta measure, of which I conjecture about 8,97,000 may be rivers, marshes, hills, rocks, or barren land, and 38,72,00 fit for the plough. As the whole pays only to government 68,155 Rs. 10 A. 13 G. we may readily conclude that it is in a wretched state of cultivation ; and, so far as I could learn, not more than 16,50,000 bigahs are occupied. The condition perhaps, would on the whole have been worse, had not vast alienations taken place, so that the assessment is somewhat more decent on the remainder, and there some stimulus has been given to industry, the example of which, and its advantages, prevent the other parts from being totally abandoned.

I shall now point out the principal of these alienations, some of which form estates of great extent, and capable of being rendered highly valuable. The Rajas of Kharakpur, although they overthrew the Kshetauris who occupied the more clear and cultivated parts near the Ganges, seem to have in a great measure contented themselves with these, and a kind of superiority over the Bhungiyas, or original inhabitants of the forests. These gave a trifling tribute, and held vast tracts for military services, which strengthened the Rajas in troublesome times. During the short vigour of the Mogul Government, while the Rajas enjoyed court favour, and were disposed to be peaceable subjects, they settled many villages, of civilized tribes, in fertile spots intermixed with the forests ; and these seem to have been readily admitted by the ruder natives, as affording a means for supplying their wants. These villages paid rent to the Raja, and were called Khalesah, while the lands held by military service were called Ghatwali. The chiefs of the Bhungiyas seem then to have been tolerably obedient, and each on his parent's decease received investiture from the Raja, which seems to have given the Rajas an opportunity of introducing several Rajputs among the Ghatwals, and this naturally produced disgust. No sooner, therefore, did the weakness of Government bring

the Rajas into trouble, than many of the Bhungiyas refused obedience ; and connecting the Raja's interests with those of the Government, broke out into actual rebellion, and that at a time when Government was severely pressed. Two gentlemen of very considerable abilities, Captains Brooke and Browne were successively employed to reduce them to obedience, and succeeded partly by vigorous attacks and partly by concessions. The Ghatwals were secured in the hereditary succession to their lands, were bound to pay a certain annual tribute to the Raja, and to keep a certain number of armed men to defend the frontier, and to assist the Raja in the support of the police ; for which purpose they were bound to attend him, whenever required, on being allowed provisions. On the final settlement the same general system prevailed, but many differences in the condition of various Ghatwals have arisen from particular circumstances. In a proper view of the regulations the whole ought to have been considered as vassals, freed from their base tenure, and made to hold their lands immediately of the Government, but the proclamations for this purpose were carefully concealed, until the time allowed for claims of exemption expired ; so that only one person has been set free.

Jaganathdev, although of no very high rank among his tribe, the Bhungiyas, being a violent enterprising man, became their chief leader in the insurrection, and the animosities between him and the Rajas were so high, that it was judged prudent to avoid all mutual interference and it was ordered, that he should pay his tribute of 7251 rupees to the Company's officers, together with Rs. 917 as. 11 the Raja's commission. The Collector receives the whole, and accounts to the Raja for the commission. Rupnarayan the son of Jagannath, is so ill advised, as the family hatred has not in the least diminished, that he seems inclined to refuse payment of the commission.

Ramnarayan, and several of the larger Ghatwals, not only received lands for the support of their officers and men, but also some of the assessed or Khalesh villages, and on that account paid an increase of revenue. Some

also of the larger Ghatwals have been totally exempted from military service, and on that account have increased the revenue. I have already stated that this plan should be followed with all the others, but as the Zemindar now has neither charge of the frontier, nor police, both of which are entirely at the expense of Government, all increases of rent given for such exemption should go to the public revenue. The Raja is now again setting up the claim of investing heirs, and in general asks nothing ; but his evident view is to introduce the custom of investiture, and then he will attempt to establish the right of selection. Some of the Ghatwals have submitted ; others refuse to receive any investiture as unnecessary, they having grants in perpetuity from Government.

I now shall mention the principal Ghatwals.

Rupnarayan above mentioned is the most powerful. He calls himself a Thakur, that is the representative of a younger brother of a Tikayat or Chief, and is said to be descended from a son of the family of Brajabhushan, who will be afterwards mentioned ; but his people could not trace the descent farther than to Bhishma, commonly here called Bhikham, his great-grandfather. Whether however this was owing to ignorance I cannot say. The father of Bhikham may have had an infidel and barbarous name, and Rupnarayan now pretends to be of the family of the sun. This Bhikham had four sons, Jaga, Lakshmi, Karam, and Gopal. The two first died without sons. Karam left one son Jagannath, and Rupnarayan is his only son. Gopal, the youngest son of Bhikham, had two sons, Dharma, and one whose name I did not learn. Dharma died in prison, and left three sons, Raghunath, Krishna, and Chhatra. All the family take the title of Dev or Lord, and the younger branches are besides called Babu. Rupnarayan is a stout little elderly man, very blunt, and little polished in his manners, but not unkind. He unfortunately still considers himself as a person of some power, and keeps up an armed rabble ; otherwise, being a prudent active man, his property would be in a better condition. His estate called Chandwe Pasoi, so far as I can conjecture amounts to almost 7,40,000 Calcutta bighas, of which 1,17,000 may

be rivers, hills, rocks, or otherwise barren, and about 251,000 may be cultivated. He has a great extent of the fine land on the banks of the Chandan, and these are fully occupied, and let for rent. The cultivated lands, scattered thinly through the woods, are in general given free of rent to the younger branches of the family, to servants, and to the armed rabble that keeps up his notions of self-importance.

In the assessed land Rupnarayan grants leases for from two to four years to each tenant, specifying by conjecture the extent of the possession, and the rate at which such as is cultivated is to pay. When the lease expires, the rate may be altered; but this is not usually done, there being few tenants and much land. The estate is divided into seven Pergunahs; but he possesses only one Pergunah in whole; of the others he has only portions. The measure differs in each, the largest being 125 cubits square, and the smallest 99. The latter is that used in Chandwe Pergunah, of which he possesses the whole, and the rates by which he lets the land there, are as follows:—

	Customary bigah.	Calcutta bigah.
Rice and suggar-cane land, best anas	48 0	32 7
Do. 2nd	32 0	20 18
Do. 3rd	16 0	10 9
Do. 4th	8 0	5 4½
Two crop land, best	.. 24 0	16 3½
Ditto, worst,	.. 8 0	5 4½
Wheat and barley, best	.. 12 0	7 16¾
Ditto, worst	.. 3 0	1 19¼
Naruya, best	.. 6 0	3 18½
Ditto, worst	.. 3 0	1 19½
Mustard	.. 12 0	7 16¾

These are the principal rates paid in money, most kinds of pulse pay a certain quantity of grain for each bigah, and a little is let by a division of the crops. On

the whole, the great crop being rice, the rents should not be less on an average than 12 anas a Calcutta bigah. The Zemindar, however, pays for keeping the canals in repair. None of the rents are farmed; and, had the armed rabble been dismissed, Rupnarayan must have had the credit of being the best landlord as a manager in the district. His manner of living has no sort of splendour, but he is lavish to religious mendicants with whom the country, from being the route to Baidyanath and Jagannath, is dreadfully infested; but still he has probably large hidden treasures. It must be observed, that he pays 8,168R a year for 6323,000 bigahs of land capable of being ploughed, or one rupee for  $77\frac{1}{2}$  bigahs; for I believe, that he is burthened with very little free land, except that assigned by himself for his establishment.

Pergunah Hangrwe (Hendooa, R.) is a very large portion of Kharakpur, although all the northern part of what Major Rennell lays down as belonging to it, forms the Pergunah of Godda, a part of Rupnarayan's estate just now described. By far the greater part of Hangrwe is still in the possession of a Kshetauri family, although it pays to the Raja of Kharakpur 2372 Rupees a year; but it has been entirely exempted from military service.

The first person of the present family, who held this estate, so far as is known, was Vijay Singha, who possessed it from the 100<sup>1</sup> to the 1037 year Fusli (A. D. 1594-1630). He left four sons, Uday, Kamal, Padma, and Kirat, the eldest succeeded to the whole, and kept it until the 1068 (A. D. 1661). Puran, the son of Uday, possessed the whole estate until the 1107 (A. D. 1700), and left four sons, Bhim, Than, Jagan, and Lakshman. Bhim had two sons, Tilak and Prem, the eldest of whom succeeded his grandfather, and held the estate until the 1137 (A. D. 1730). He was succeeded by his nephew Dalel, who possessed the estate until 1170 (A. D. 1763). He left two sons, Sobha and Kesor. The eldest enjoyed the estate until 1194 (A. D. 1787) and was succeeded by his nephew Purandar, who held it until 1215 (A. D. 1808), when he died without male issue; and was succeeded by his brother Jhabban Singha, the present

occupant, who is called a Raja. He is a very civil man, but appears to have slender abilities, and very little education. Moti Singha, his nearest relation, however seems to be a well behaved, sensible person. They say that Raja Kaderali wanted them to take a new investiture, and to make a new agreement, but this they declined as the family had an order (Purwanah) from Government, granting them possession. Kaderali then sent a steward (Tahasildar) to take possession; but the Kshetauris drove him away, and sent an agent (Vakil) to offer payment of the revenue, which was rejected, and a new Ghatwal was appointed. None of the tenants would pay this man, nor obey his orders, and Jhabban having complained to the magistrate, the new man was ordered to remove himself, and Kaderali was informed that if he had any claim on the estate, it must be procured by law. In 1810 Kaderali sent another steward, with many of the armed rabble belonging to the Ghatwali establishment; but although he remained six months, and a vast squabble ensued he was unable to collect a rupee. Jhabban again complained to the Magistrate, who sent similar orders to Kaderali, and directed Jhabban to offer payment of the arrears; and if it was refused, to lodge the money in the court, which has been done. Such is the family account. I did not hear that of the opposite party. We cannot however be surprized that Kaderali should be anxious to recover somewhat more from this estate, which only pays him the above mentioned trifles; but, so far as I could learn, contains about 12,13,000 bigahs, of which about 1,64,000 are barren, and 1,049,000 of a soil capable of cultivation, while 435,765 may be now occupied. Three whole villages or about  $\frac{1}{50}$  of the whole are claimed as free; but this is probably a pretence, as I see none such registered. The owners have however alienated a portion of their estates in perpetuity to six Ghatwals, who pay in all 398 R. but I cannot say exactly the extent which these possess. It is, however, probably about 1-11 of the whole, as other Ghatwals in the vicinity have an extent somewhat similar, in proportion to the rent, which they pay. These subordinate Ghatwals furnish also some armed men, when required to send with money, or for such

services. Five of them are Ksheturis, perhaps branches of the family ; the sixth is a Parigha. In 1163 Dalel Singha measured all the rice and sugarcane land by a bigah of 90 cubits (18,224 square feet) and fixed the rate to be paid for this at 11 anas a bigah or about  $7\frac{1}{4}$  anas for the bigah of the Calcutta measure. All lands unfit for rice or sugar pay nothing except ground rent for the houses of traders and artificers. Every farmer takes as much high land for houses, gardens and plantations as he pleases, and might cultivate as much as he liked with any other crop ; but the high lands are almost totally neglected, paying no rent ; while the rice lands, which are moderately assessed, are very fully occupied ; for it seems, that if a landlord puts no value on his lands, no one else will.

The estate is now divided into farms of some tolerable size, each of which is let to a tenant, called here Mostajer, who obtains a lease specifying neither time, extent, nor rent, only saying that no more than the custom will be demanded, and so long as that is paid, no one can be turned out. These tenants let the land again to under-tenants, at rack rent, taking from 14 to 16 anas a bigah, or from about 11 to  $12\frac{1}{2}$  anas for one of the Calcutta measure ; but they pay almost the whole expense of the establishment, and at the Dasahara each makes a present to the landlord of four anas, a male kid, and a pot of curdled milk. To this management we may attribute the good condition of the lands fit for rice ; and the facility with which the rents are collected. None of the rents are farmed, but the whole estate is divided into ten Taluks, in each of which is placed an agent or Gomashtah, who receives from 4 to 16 anas a year from each tenant ( Mostajer ), and has no other avowed allowance. Each has five or six attendants ( Gorayits ), who are allowed each from 3 to 5 bigahs of land, and watch the villages at night. The whole head establishments consists of one Dewan and a clerk. The former receives 40 bigahs of land, and from 2 to 16 anas a year from each tenant the latter has 2R. a month. One or two of the Gomashtahs are always in waiting. The principal expense seems to be 2 agents, that are employed at Bhagalpur to transact business with the

Judge and Collector, and who are allowed 18 R. a month. With this management the income should be very great; but there is not about the owner the smallest appearance of splendour, nor even a rabble of attendants, and the people seem to be reclaimed from turbulent habits. It is probable that great sums are annually concealed.

Brajabhushan Singha is a Tikayit or chief of the Bhungiyas, and Rupnarayan pretends to be descended from a younger brother of one of this person's ancestors. Hari Singha is the first person of this family, of whom anything is known, and he has been succeeded in direct lineal descent by Mohan, Bariyar, Uday, Mardan, and Brajabhushan. His lands form a part of Hangrwe, and may amount in all to 96,000 bigahs, of which 13,000 may be barren, and 35,000 may be occupied. His estate is managed exactly as Jhabban Singha's, and he pays to Kaderali 385, R. and maintains 45 armed men ready to support the police, to whom he gives lands free of rent.

Bhikhari Singha, a person of the same tribe, but of inferior rank, possesses a small portion of the same Pergunah, pays to Raja Kaderali 184 R. a year, and maintains 20 armed men. His lands in all may amount to 13,000 or 14,000 bigahs, of which perhaps 1,800 are barren, and 4,700 occupied. He manages in the same manner with the other Ghatwals of the Pergunah.

These deductions reduce the estate of Kharakpur almost a half, leaving about 27,06,000 bigahs, of which 21,04,000 may be fit for cultivation, and 923,000 may be occupied. The whole of the above enormous deduction paying only to the Raja 2941 R., and discharging only R. 8168, 11 of the revenue.

But the Ghatwali system has yet much more reduced this estate. In the division of Bangka are the following Ghatwals :—

Avadhut Singha is by far the most considerable; and occupies a large portion of Pergunah Chandan, on the fine banks of the river of that name. He says that his ancestor Vishnu Singha, a chief (Tikayit) of the Bhungiyas in Kharakdiha, came to Chandan, and finding it waste, lived there independent of all earthly power, as

did his son Mahadev, and grandson Hari Singha. Kangsa, the fourth occupant of Chandan, agreed to give annually to the Kharakpur Raja 100 R. worth of honey and peacocks' feathers and to assist him in his wars with 100 men. He was succeeded direct by his lineal descendants Jajhar, Bariyar, Lakshman, and Anup. This last agreed to pay 125 R. in money, and to continue the same military service. He was succeeded by his son Raghunath, and his grandson Futeh Singha, who agreed with Captain Browne to pay  $\frac{1}{4}$  of his collections to the Government, in the hands of which the Raja's estates then were. Three years afterwards he agreed, on exemption from the military service, to pay to the same gentleman R.  $916\frac{3}{4}$  as land rent (Mal) and 401 R. for customs (Mehmani). In the Fusli year 1200 (A.D. 1793) on the abolition of customs, he agreed to pay in all R. 1020. 13. A. 15. G. Some years afterwards the Raja took from him a manor (Mauza), reducing the rent to R. 946. 11. A. 15G. which his son now pays. Avadhut Singha is a plain unaffected civil man, totally alienated from turbulent habits; and is occupied in improving his estate, which contains 70 Mauzas. He lets his land, that has been regularly cultivated, at so much a bigah, according to 6 qualities. The bigah is 120 cubits square, or 32,400 sq. ft.

	Customary bigah	Calcutta bigah
Best land	Anas 50	22. $4\frac{1}{2}$
2nd land	30	13. $6\frac{3}{4}$
3rd land	24	10. $13\frac{1}{2}$
4th land	20	8. $17\frac{3}{4}$
5th land	16	7. $2\frac{1}{4}$
6th land	10	4. $8\frac{3}{4}$

Forest lands are let by the Choth or piece, a farmer agreeing to give so much a year, for a certain space, without measurement, for a certain number of years. When the lease expires, if the lands are good, a new lease is made out, at the common rate, by the bigah. If the soil is poor, it is allowed to recover by a fallow. None of the rents are farmed.

Babu Nagar Singha, the son of Nawab, the son of Mande, son of Raghunath, the grandfather of the above mentioned Avadhut, has also a portion of Chandan Pergunah, which is called Nawada, and contains 12 Mauzas. He pays for this 5 Rupees a year, and keeps eight matchlockmen and 2 archers. He has another similar, but smaller estate in Osla.

Bhoal Singha, a proper Rajput of Karariya near Bangka, possesses 54 Mauzas. He pays R. 51 a year, and keeps 14 armed men.

Bhola Singha, another Rajput of Dodhari, and of the same family with the Raja, keeps 28 armed men, and pays R. 30. 2A. 6G.

Ratna Singha and Sivadatta Singha, Rajputs of Kakuyara, keep 165 armed men, and pay R. 245. 12A. a year.

Haradatta and Maheswar, Rajputs of Tardihi, keep 3 armed men, and pay R. 7. 0A. 6. G.

Manorath Ray, a Sakadwipi Brahman of Samakiya, keeps 29 armed men, and pays R. 45. 2A. 6G. a year.

I can form but a very vague conjecture concerning the extent that these dependent landholders possess, the accounts, which I received, being entirely contradictory, each party stating what he claimed, and not what he held, we may however, I think, at least admit that one-third of the whole of Kaderali's property, in Bangka goes to these Ghatwals for R. 1330. 12 A. 13 G. reducing the property, for that trifle, by perhaps 4 86,000 bigahs, of which 78,000 may be barren, and 1,67,000 cultivated; for although what is held for military service is very badly cultivated, Chandan is very fully occupied, and the eastern parts, where another class of Ghatwals have possessions, are still in a worse state than the western, where all the above Ghatwals are established.

In Tarapur are 17 Ghatwals, who occupy a vast extent; but so far as I can learn, this is reckoned nothing in the Raja's books. For instance the lease or grant of Babu Digambar Singha specifies 900 bighas; but his district extends from north to south 2½ coses, and from

east to west is from half a cose to one and a half wide, and may probably contain 18 or 20 thousand bigahs Calcutta measure. In fact, I think that rather more than one-half of the whole division is inhabited by Ghatwals and their dependents, and that the Raja has not a single tenant in that extent, but in this is contained a vast proportion of the hills and barren land, while, of what is fit for the plough, a very small proportion is occupied; so that the Raja's half is by far the most valuable, even were the whole fit for the purpose cultivated, and in the present state the value Ghatwali lands of Tarapur is exceedingly trifling. Making allowances for these circumstances, these 17 Ghatwalis may reduce the estate by 6,34,000 bigahs Calcutta measure, of which 1,80,000 may be barren, and 54,000 occupied.

I did not learn the history of all these Ghatwals, nor the total amount of what they pay. I suspect however that the whole of their payments scarcely amounts to 200 R. the pension, which one of them receives, as being chief of the Raja's family. The number of men that they keep is 233. I shall mention some of the most remarkable.

Digambar Singha of Beldiha is the person above alluded to, as the Raja's kinsman, and has possessed of 18 or 20,000 bigahs Calcutta measure, of which, he says 425 customary bighas are occupied, but on this little reliance can be placed. He is descended of a Khargu Singha, who was either father or grandfather of Dandu, who conquered the Kshetauris, but I did not learn his pedigree, although, as I have lately mentioned, he is considered as the head of the family, and adheres to the pagan worship. He obtained this land as a reward for managing a Custom house, paying neither rent nor military service; and, although the Custom house has been abolished, he is allowed to retain it. His son is Bhola Singha of Dodhari before mentioned.

Ranjit Singha, a chief (Tikayit) of the Bhungiyas, possesses a very large territory, Kharna, which is reckoned to contain 18 villages, and extends about 4 coses from east to west by about 1 cose north and south; for this he pays 35½ R. a year. He also possesses in common with a chief (Tikayit) and person of lower rank

(Thakur) of the same tribe, named Loknarayan and Meghnal, 3 Mauzas of Osla, and 2 of Pergunah Sarui. The 3 Mauzas extend north and south 10 coses, and east and west 7 coses. One of the two detached Mauzas is about  $\frac{1}{4}$  by  $\frac{3}{8}$  of a cose, the other about  $\frac{1}{4}$  cose each way. No rent is paid for these Mauzas, but 101 armed men are kept. Ranjit has another Mauza named Chaura, for which he pays 9 R. but keeps no armed men. The whole of these possessions were confirmed in a grant (Sunud) made by a Mr. Sherburn. Ranjit is a very civil man, but of very slender abilities. The Raja's people persuaded him to take a new grant for life, making no demand; it was only requested that he would give up the grant made by Mr. Sherburn. This, however, Ranjit had sense to retain, some person about him having learned, that the deed might be of use. Ranjit is brother in-law of Avadhut of Chandan, but everything about him is in confusion, and he still retains the idea of his armed rabble being useful. Besides his possessions here, he has 60 Mauzas of Gidhaur, that have been annexed to the district of Ramgar. The family tradition is that his ancestor Gandha Singha originally dwelt in Pergunah Silkori of Ramgar; but that, finding Kharna waste, he occupied it, living totally independent, as also did his son Mahakum. His son Khosal agreed to acknowledge Mozuffurali as his superior. Anath, the son of Khosal, assisted Mozuffur, when he absconded, on being accused of the robbery, and was caught along with him by Mr. Clerk. On this occasion his houses were burnt, and he was sent to Patna, where he died in prison. His son Ajit Singha obtained the grant from Mr. Sherburn, and was father of Ranjit, the present occupant.

The Tikayit Loknarayan, who shares in some of the above mentioned estates, resides in the part of Gidhaur that belongs to Ramgar, where he also has some lands. He is descended in a direct male line from a Prawal Singha, by Uday, Hira, Dhara, Mitthunarayan, and Dharmanarayan his father.

Meghnal Thakur, the other person engaged in these estates, has some lands in Ramgar, and resides there in

Chorghara. His ancestor Kesor Singha came to this country, and drove out some Kshetauris, who then held the lands which his descendant occupied. He and his son Tilak lived independent, but Dalel, the grandson, agreed to serve the ancestors of the Raja, Dalel was succeeded by Khosal, he by Govinda, and he by Meghnal, now 8 years old.

In Mallepur the Raja's people said that about a seventh part of the land capable of being ploughed, and 1/6 of the cultivated belong to the Ghatwals, the whole paying to the Raja R. 402. 6A.  $2\frac{1}{2}$ G. and keeping 198 armed men. The Ghatwals are 24 in number, but none of them remarkable. According to my estimate of the value of the country, this should take about 51,000 bigahs of good land from the estate, and of these about 12,000 may be cultivated.

These smaller Ghatwals are bound by their leases or grants to keep a certain number of men, to each of whom they are held to give a certain quantity of land, usually 10 customary bigahs, at a trifling rent, of about 2 anas a bigah, for what is cultivated. The remainder they let for their own support, and to pay the trifling revenue. The forest lands are let usually by the Choth, or farm, a family paying from 2 to 10 R. a year, for as much as it can cultivate; but rice land, most of which is regularly rented, is either assessed by the bigah, at a tolerable rent, or pays one half of the produce.

On the whole for this Ghatwali establishment, besides the great Pergunah of Hangrwe, and the possessions of Rupnarayan, we must deduct from Kharakpur about 9,13,000 bigahs of land fit for the plough, of which 2,33,000 may be occupied, and this pays less to the Raja than 2000 R. a year. Still, however, there remains 11,91,000 bigahs of land fit for the plough, of which 6,90,000 may be occupied, and after deducting the sums above mentioned, burthened only with a revenue of 55,046 R. a year. Many deductions however must still be made.

Another Ghatwali establishment for repressing the incursions of the mountaineers has obtained, according to the Suzawul's papers, 9119 bigahs customary measure,

and of these 906 are in cultivation. This amounts to about 13,800 bigahs Calcutta measure, of which 1380 are cultivated. This, I believe, of right belongs entirely to Government, but the Raja has set up a claim of 2 anas on the bigah, of all that is cultivated, and some of the people have been induced to pay it.

The invalid establishment has taken about 35,700 of the customary bighas from this estate, and this amounts to about 67,400 of the Calcutta measure. About  $\frac{1}{6}$  of this is still the Raja's property, but hitherto he has benefited little by it. I shall therefore deduct the whole.

The free lands, except what belongs to Kaderali as his private property, are not very important, are subdivided among 441 persons, and about one-half of them may be situated on lands that have been alienated from the Zemindary. The half amounting to about 17,500 customary bigahs, or 33,000 of the Culcutta standard, may be deducted from the lands capable of cultivation, and it is not better occupied than the Zemindary, so that we may allow 8,400 to be cultivated. I have already mentioned, that Pergunah Kajra was granted to the family as Eltumaga. This is a very fine estate, which the family admits to contain 25,000 customary bigahs, and at least 20,000 of these are cultivated, being in the immediate neighbourhood of Suryagarha, where very considerable activity prevails. I have no doubt, from its appearance, but that would measure more than 25,000 bigahs, but the whole Eltumaga registered amounts only to 972 customary bigahs. This therefore is a point that requires particular attention; as the Government might probably be entitled to the whole of Kajra except these 972 bigahs. The manner, how it came to be increased, will be afterwards mentioned. I have also mentioned that the Raja obtained a Jaygir, and in the list of free land I find 4,779 bigahs granted for this purpose. These two amounting to 5,751 customary bigahs, are equal to rather more than 10,870 of the Calcutta measure, and perhaps 5000 may be cultivated.

But farther, the Raja obtained the whole of Pergunah Haveli Kharakpur free of rent, and in the public records this is valued at R. 12,911, a year; but no measurement

is given. In the same books the whole estate including free land is valued at R. 85,893, so that it should be about 15 per cent, of the whole; but as little or no value was put on the wilder parts, which have hitherto been chiefly detailed, we may allow, that it amounted to  $1/12$  of the remaining clear part, and this will give no less than 99,250 Calcutta bigahs fit for the plough, of which 57,500 may be occupied. This, with the other free lands above-mentioned, will leave the Zemindary about 10,17,000 Calcutta bigahs of land fit for the plough of which about 6,00,000 are occupied.

The leases are usually for a short term of years, from four to seven, and the Zemindar alleges, that when a lease expires, he may increase the rent; but he seldom does so, because tenants are difficult to procure. The leases are given to one or two men in a manor (Mauza) with an &c., mention only the rates, and only what is cultivated pays rent. A few have leases for a certain farm without its extent being mentioned, but the amount of the rent is specified, a tenure which is here called Thikabandi. A few others have extent and rent and defined, are called Mokurruri, and here are considered as perpetual. The rates, on what is paid by money rent, are fixed according to the value of the soil; which in some places is divided as far as 20 qualities, in others as far only as eight, and the rates are low; but this is of little consequence, as by far the greater part of the rents are collected by a division of the crop, and are therefore very high, when the Zemindar is not defrauded; but on such an extensive estate the frauds are enormous.

The village establishment is as follows :—

The estate is divided into Chuklahs, over each of which presides a Chaudhuri or Chuklahdar. Some of these are paid in land called Nankar, and are besides allowed 3 per cent. on the rupee paid by the tenant. Others are allowed 2 anas on the rupee. In fact both pay annually a sum of money to the Raja, who thus keeps his accounts low. Under the Chuklahdars are Mokaddams or head men of manors, and Patwaris or clerks; but sometimes one Mokaddam has two clerks, and one clerk

usually manages two or three manors (Mauzas). The Mokaddam takes from the tenant  $\frac{1}{2}$  ana on the rupee of money rent, and 1 ser on the man of grain before division, or  $\frac{1}{40}$  of the crop. Some of them have also free lands. The clerk is allowed half as much as the Mokaddam. Each is allowed a Tahalu or servant, who receives from 1 to 5 bigahs free of rent. For every two or three small manors there is a watchman (Pasban), and large manors have two or three. Their duty is to watch the villages by night, and to collect money in the day. From the Raja they are allowed from 4 to 7 bigahs each, and part of the grain before it is divided ; and each tenant gives the watchman of his village  $2\frac{1}{2}$  sers of grain.

Almost the whole rents are farmed, which excites loud complaints.

6. Pergunah Gidhaur is a fine estate, but a considerable portion of it is situated in the district of Ramgar, and it is not mentioned in the Ayeen Akbery of Mr. Gladwin, unless it may be the Gundhore of Sircar Behar. The whole of what is contained in this district is situated in the division of Mallepur. According to the family traditions, Raja Vikram Singha, a Chandel Rajput, was first Zemindar of Gidhaur. He originally resided at Agauri near Vijaynagar ; but in a dream he was desired by Baidyanath to go to Gidhaur, and occupy the land, which was then waste, and the God gave him at the same time permission to take all the offerings made at his temple. When he arose, the people observed on his forehead a mark of ashes ; and, on being asked how the mark came, he told them his dream. Such an evident manifestation of divine favour encouraged all his kinsmen to follow him, and in a few days they set out for Dilli, to offer their services, which were accepted. Soon after, the Rajput informed the king of his dream, and obtained permission to go and occupy the country. The grant is said to have been dated in the Fusli year 473 (A.D. 1066) but that must, I presume, be a mistake, as the Fusli year, I believe, is a Muhammedan institution ; and the Muhammedan kings did not come to Dilli until long after that period (1205-1210). By this grant he obtained a right to

Pergunah Gidhaur, Mahal Chakai a part of Ramgar, Pergunah Bishazari in the district of Behar, Pergunah Chandan Bhuka that will be afterwards mentioned ; and Mahals Devghar and Sarma, and Pergunah Tiyur, all in the district of Virbhumi. The Raja, taking with him some troops, came into the country, which was then occupied by small hordes of thieves of the Dosad and Choyer tribes. I have already given an account of the Dosads. Choyer or archer is a name often given to the Bhungiyas. These he reduced, and possessed the country, until the year 504 (A.D. 1097). He was succeeded in regular descent as follows :—

Singha Dev to 556 (A.D. 1149).  
 Dev Singha to 602 (A.D. 1195).  
 Ramnarayan to 668 (A.D. 1261).  
 Raj Singha to 704 (A.D. 1297).  
 Darpanarayan to 748 (A.D. 1341).  
 Rajmal to 798 (A.D. 1391).  
 Bariyar Singha to 844 (A.D. 1437).  
 Puranmal to 896 (A.D. 1489).

This person built the present temple of Baidyanath. Eight generations by this account are made to occupy 392 years, which seems highly improbable, and a reasonable allowance for their lives would bring the time of the first Zemindar within the Muhammedan period. Puranmal had two sons, and divided his estate between them. I shall first follow the succession of Hari Singha, the eldest, in regular descent from father to son.

Hari Singha enjoyed his share until 922 (A.D. 1515)  
 Devi Singha to 954 (A.D. 1547).  
 Kesari Singha to 979 (A.D. 1572).  
 Pahar Singha to 1015 (A.D. 1608).  
 Dolan Singha to 1060 (A.D. 1653).  
 Krishna Singha to 1116 (A.D. 1709).  
 Padma Singha to 1124 (A.D. 1717).  
 Syam Singha to 1150 (A.D. 1743).  
 Amar Singha to 1183 (A.D. 1776).

This Raja had sundry wars with Asuduzzuman and Alinuki Khans, the Rajas or Devans of Virbhumi. These wars were continued with various success from the 11/1 to the 1177 (A.D. 1764-1770), but in the year following the Moslem prevailed, and took entirely Devghar, Sarma, Tiyur, and Rohini. The 2/3 of the offerings at Devghar, which the family had hitherto enjoyed, were now also lost. Amar Singha made many complaints to the Subah. In 1194 (A.D. 1787) his son Gopal, who now enjoys the remainder of this share of the estate, went to Calcutta with his kinsman Darpa, and complained to Mr. Meyers, who sent letters to the respective Collectors directing them to enquire who were the real proprietors of the lands. The answers were favourable to the claims of the family; but all the lands had been sold for the arrears of revenue, except Devghar, which had been kept in the hands of Government, and the income applied to discharge the arrears of revenue which the produce of the sale had not completed. The Raja has not yet given up hopes of being able to recover this.

Raja Gopal Singha, when I saw him, was 49 years of age, a fat heavy man, but very civil. His brothers, sons and kinsmen are very good looking men, and seem to be treated by the head of the family with great kindness. He can read only the Nagri character, and attends to accompts and letters on business alone, neither understanding nor caring for the poets, the only authors in the Hindi dialect. His native agents praise him as an excellent manager; but a Maronite of Aleppo, who manages part of the estates for a woman that farms the rents, and who seems to be a very intelligent man, assures me, that he is in debt to every one who will lend him money, and extremely necessitous, which is followed by rapacity towards his tenantry. He lives part of the year in the share of his estate, that is in Ramgar, and part at Jamuyi in this district, but his houses are mean. His equipage however is numerous, and showy, and he lavishes large sums on dancers.

The whole of his share of Gidhaur in this district consists of 108½ Mauzas, of which 7½ are said to be free;

$2\frac{1}{2}$  having been granted to Baidyanath, 1 to his Guru or spiritual guide, 1 to his Purohit of officiating priest, 1 to a Dasnami, and 2 to 2 Brahmans. Besides that, there are 759 customary bigahs, or 1549 of the Calcutta measure. It must be observed that in a list of the free lands in the district, which I procured from the Collector, no mention is made of those in Gidhaur, whether from an accidental omission in the copyist, or from none having been registered, I cannot say; but this would require investigation. He has let to under-tenants (Thikadars) as follows:—

	Rs.
4 Mauzas to his brother Dikpal for ..	513
9 " to his brother Kirtipal ..	821
7 " to his son Yasamanta ..	1,801
3 " to his son Nawab Singha ..	326
$53\frac{1}{2}$ " to 53 dependents, mostly kinsmen ..	<u>5,477</u>
	7,945
$76\frac{1}{2}$ .	

The four first have obtained leases in perpetuity, the others for short terms of years. He pays to the Collector R. 6,575, so that he has alienated  $84/108\frac{1}{2}$  parts of his estate, for what pays his revenue, leaving him only a balance of R. 1370 and  $23\frac{1}{2}/108\frac{1}{2}$  of his lands for his support. His chief establishment is said to be—

	per mensem R.
1 Dewan or Collector ..	34
1 Tahasildar or Steward ..	30
1 Deputy Collector ..	10
1 Munshi or Persian Interpreter ..	11
1 Chaudhuri or Superintendent ..	10
2 Sereshtadars or Persian clerks ..	13
4 Matsuddis or Hindi clerks ..	25
2 Agents (Vakils) at Bhagalpur ..	14
1 Treasurer (Khazanchi) ..	5
25 Guards (Peyadahs) ..	60
1 Chief Officer (Jamadar) ..	5
1 Inferior Officer (Merdha) ..	3
1 Keeper of Records (Dustur) ..	3
1 Sweeper ..	2

Or annually R. 2,688, although the greater part of his estate is let at very low rents, and he takes no share in its management.

His domestics are said to be as follows—

1	Khansamah or Butler	..	4....
1	Chobdar or silver stick	..	4....
5	Khedmutgars or footmen	..	12....
2	Mushalchis or torch-bearers	..	5....
1	Taylor	..	3....
2	Tahaliyas or scullions	..	4....
1	Elwphant	..	11....
2	Camels	..	5....
5	Horses	..	12....
1	Cook, a Brahman	..	4....
4	Falcons	..	10....
1	Brahman, to officiate in the family chapel.	..	3....
	Do. for offerings	..	0-12-0

R. 77-12..

Or annually 933 rupees ; but the three festivals Dasahara, Syamapuja, and Holi, cost almost as much.

His usual practice is to rise early. He takes about 40 minutes to clean himself, and then sits in his office until noon, attending to business. He then prays, bathes, and eats, which occupy about  $1\frac{1}{2}$  hour. He then sleeps. In the evening he very often goes out to hawk. Then he cleans himself again, and prays, which occupies about an hour. He then again sits in his office, until about 9 in the evening, when he retires into the inner apartments to eat and sleep.

I now proceed to the other branch of the family, which is on exceeding bad terms with the elder. Viswambhar Singha, the second son of Puranmal, obtained a half of his father's estates in the year 896 (A.D. 1489), and held it until 930 (A.D. 1523).

His son Durjan to 967 (A.D. 1560).  
 His brother Kalyan Singha to 1009 (A.D. 1602).  
 His son Vishnu Singha to 1061 (A.D. 1654).  
 His son Siva Singha, six months.  
 His son Lakshman to 1087 (A.D. 1680).  
 His son Mardan Singha to 1143 (A.D. 1736).  
 His son Futeh Singha to 1169 (A.D. 1762).  
 His son Ajit Singha to 1181 (A.D. 1774).  
 His son Darpa Singha to 1200 (A.D. 1793).

His son Nirbhay Singha, the present owner, is a thin very timid man, but his kinsmen also are very well-looked persons, and all attentive to strangers. The Raja is 42 years of age. He rises early, and takes 40 or 50 minutes to clean himself. Like his kinsman, he then sits in his office until noon. He then washes, and prays for about 40 or 50 minutes, and eats for about half an hour. He then sleeps for about  $1\frac{1}{2}$  hour. He then talks with his chief officers or with men of learning until sunset. He then cleans himself again, and prays for about 40 minutes. Then he sits, until 10 or 11 o'clock, hearing legendary tales from Pandits. He then returns to his inner apartments to wash, eat and sleep.

His share also contains  $108\frac{1}{2}$  Mauzas; but only  $5\frac{1}{2}$  are free of rent, and of these  $1\frac{1}{2}$  have been given to Baidyanath, 1 to the Raja's spiritual guide, 2 to a Dasnami Sannyasi, and 1 to a Sakadwipi physician.

The Raja has alienated at low rents to under-tenants (Thikadars) the following portions:—

		R.
4	Mauzas to his wife ..	326
4	,, to his brother Hormut ..	301
3	,, to his brother Vikram ..	301
6	,, to his brother Trilochan ..	301
2	,, to his mother ..	301
1	,, to Hokum, married to his father's sister.	255
2	,, to Dan, married to his own sister	21
5	,, to Ratna grandson of Mardan	850

1	Mauzas to Manorath, his mother's brother	151
1	„ to Mohan his wife's brother ..	101
		R.
43½	„ to 38 dependents and friends ..	5,700
72½		R. 8,608

The first ten have procured leases in perpetuity, the others for short terms of years. For this estate he pays to Government 8425 R., which is defrayed by the above rents, and he has 30½/108½ of his share for his own support.

The reason assigned by the Zemindars for giving so great a part of their estate to under-tenants, is that in the year 1191 (A.D. 1784) a certain Merza Bahadurbeg Khan, having a native friend in power at Calcutta, went there, and pretending that the two Rajas mismanaged, gave nothing to Government, and had no heirs, obtained a lease (Mokurruri) of all Gidhaur for 3940¼, R. and engaged to pay the Rajas 12½ percent, on the collections. This man died in 1204 (A.D. 1797), when the Rajas and his son repaired to Bhagalpur, and both parties bid against each other, until the Rajas agreed to give 15,000, R. which they now pay. From that time they have let their lands to under tenants thinking that this would secure them from similar intrusions, although there is now, I believe, no danger of such practices, as were too common in good old times.

The whole estate, so far as I could ascertain, may contain 716,000 bigahs Calcutta measure, of which 87,000 may be rivers, hills, and barren lands, and 629,000 capable of being ploughed. There may be now occupied 268,000 bigahs. The soil is very rich, and well watered.

About 3/4 is let for money rent, half on leases called Halhaseli, that is, which are for a short term of years, and which specify neither extent nor amount of rent, but only the rate, and only what is cultivated pays. The lease is granted to one or two chief tenants, with an etc., for the remainder, and commands them to cultivate such or such a manor (Mauza) or lot (Chaok) at such rates. The other half of the leases, which are for money rent, are for a short term of years also, but each tenant

has a lease, and pays a certain sum, whether he cultivates or not. In Raja Gopal's share this tenure is called Mokurruri, in Raja Nirbhay's share it is called Bela afut Bela sokhun.

The rates on Halhaseli land are as follows :—

		Customary bigah. A.G.	Calcutta bigah. A.G.
Sugarcane	best	.. 56	19·7 $\frac{1}{4}$
Do.	lowest	.. 48	16·14 $\frac{1}{4}$
Rice	best	.. 24	8·7
Do.	lowest	.. 20	6·19 $\frac{1}{4}$
Sathi rice		.. 16	5·11 $\frac{1}{2}$
Arahar	best	.. 20	6·19 $\frac{1}{4}$
Do.	lowest	.. 16	5·11 $\frac{1}{2}$
Mustard	best	.. 20	6·19 $\frac{1}{4}$
Do.	lowest	.. 16	5·11 $\frac{1}{2}$
Maize		.. 16	5·11 $\frac{1}{2}$
Sesamum	best	.. 10	3·9 $\frac{1}{2}$
Do.	lowest	.. 8	2·15 $\frac{3}{4}$
Barley		.. 16	5·11 $\frac{1}{2}$
Wheat	best	.. 20	6·19 $\frac{1}{4}$
Do.	lowest	.. 16	5·11 $\frac{1}{2}$
Pease and other pulse	best	10	3·9 $\frac{1}{2}$
Do.	lowest	.. 8	2·15 $\frac{3}{4}$

The rates on Mokurruri leases —

		A.G.	A.G.
1st quality of land		.. 40	13·18 $\frac{1}{2}$
2nd „ „ „		.. 32	11·0 $\frac{1}{4}$
3rd „ „ „		.. 24	8·7
4th „ „ „		.. 16	5·11 $\frac{1}{2}$

A fourth of the whole is let by a division of the crop. In some places actually, in others by estimate. The high castes give 20/40, the low castes 22 $\frac{1}{2}$ /40. Mango and Jak trees pay from one to four annas each.

The whole village establishment in the assessed lands consists of 57 Gomashtahs or agents and 57 clerks. The one class receives  $\frac{1}{2}$  anna on the rupee from the Zemindar, and 2 $\frac{1}{2}$  sers of grain a bigah from the tenant; the latter class receives as much. Besides these there are 88 Dosads, who watch the villages, and collect the rents,

and are allowed 3 bigahs each, and 1 ser on each bigah let by annual measurement.

7. Pergunah Chandan Bhuka is a fine little estate belonging to the same persons, who pay for it a revenue of about 700 R. Owing to mismanagement it had become totally waste, and was a dead loss to the family, when an Indigo planter settled on it, and the Rajas gave a lease to some of his native dependents, who agreed to pay the revenue to Government, and have brought some into cultivation. The whole may amount to 96,000 Calcutta bigahs, of which 27,000 may be hills, rivers, and barren land and 69,000 remarkably rich and well watered ground; perhaps 1/10 may have been brought into cultivation; 144 customary bigahs are free land, divided among 33 persons.

7-8-9. In the vicinity of Suryagarha are three Pergunahs, Sulimabad, Suryagarha, and Abhaypur, concerning which I am in some difficulty. The common boundary with Tirahut, Behar, Chandan Bhuka, Kharakpur and Munger is clearly laid down by Major Rennell, and so far as I could judge, with great accuracy. The whole extent, judging from his map, is about 90 square miles, and deducting 8 on account of some small hills, and one half of the channel of the Ganges, which never could have entered into any native measurement, we shall have 82 sq., miles, or 157,400 Calcutta bigahs; but according to an official list of free lands, these amount to 10,019 customary bigahs in Sulimabad, 55,707 in Abhaypur, being the whole of that estate, and to 6,889 in Suryagarha; in all 72,613 customary bigahs; but these, being 110 cubits square, will amount to 137,400 of the Calcutta measure. But farther, 12,454 bigahs have been given to invalids, and these, being 110 cubits square, will amount to 23,500 of the Calcutta measure, being with the free lands 3,500 Calcutta bigahs more than the whole extent as given by the map; yet Sulimabad pays to Government 2,320R. and Suryagarha pays 8,106 R with regard to the invalids lands, there can be no doubt, so far as there are persons who have obtained grants, that these possess every inch to which they have a right, not only as they are tenacious of a straw, but of a very encroaching violent disposition. It is evident

therefore, unless the map is quite wrong, that the free lands cannot be so extensive as is pretended. Abhaypur, by the people of Kaderali, to whose family it formerly belonged, and who has still its old accompts, was said to contain only 34,000 bigahs, and other people said that it is only 2/7 of the whole, which would not give 24,000 customary bigahs. One of the owners, now Commissioner of Mungger, informed me that originally, when the grant was obtained, Abhaypur did contain what is stated in the records, and extended over the hills to the south ; but that, as it was taken from the ancestors of the Raja, the family who obtained it allowed the Raja to keep all the hills and a part of the good land, which has been annexed to his free estate of Kajra, a part of Kharakpur, and this part has therefore been excluded from the boundary above-mentioned, but is included in the grant of 53,000 bigahs of free land. The Commissioner alleges that his family do not in fact possess more than 14,000 bigahs : but probably the estimate by the general proportion of 2/7 is more accurate, and I shall allow that the Abhaypur family possess 45,000 Calcutta bighas. From the remaining 5/7 deduct the remaining free land, which is divided into petty portions carefully watched, and there will remain 88,000 bigahs ; deduct 23,000 for the invalid seapys' land, and there will remain 65,000 Calcutta bigahs, of which about 1/5 belong to Sulimabad, and the remainder to Suryagarha. The whole property of the invalids' land remains with the Zemindars, and will now become gradually productive, but hitherto it has yielded little, and the assessment must have been at the rate of 1 Rupee for about 6 Calcutta bigahs, good or bad. The soil, however, is very rich and having previously excluded the hills and Ganges, there is scarcely any deduction to be made, except for roads, burial places, broken corners, a few creeks, and the like, not exceeding 1/15 of the whole. In fact, the comparative highness of the assessment has produced a careful cultivation, and the example has extended even to the lands that are free. or occupied by invalids. The only defect is the vast space occupied by useless Mango groves.

7. It is only a small part of Sulimabad that is situated in this district, the remainder is in Behar, but

is not mentioned in Mr. Gladwin's translation of the Ayeen Akbery. I do not here learn that it has ever belonged to any chief Zemindar; and the portion in this district is sub-divided among many petty owners, who in their manners are not to be distinguished from the ordinary peasantry, a circumstance that seems to be daily gaining ground, and is totally subversive of the chief object, which the nobleman who projected the present Zemindary system had in view, that of raising a respectable native gentry.

The Zemindars of Sulimabad seem to have formerly been vassals (Melk) but now pay their revenue directly to Government. On the free lands the Maleks remain exactly on the footing under which they were in the Mogul Government. They collect the rents, deduct the expense of collection (Surunjami), account for the proceeds to the owner of the land, deducting for themselves a commission of  $\frac{1}{11}$  part of the neat proceeds of rent for fields, with  $\frac{1}{4}$  of the rent for houses, fisheries and pasture, and  $\frac{1}{2}$  anna a bigah for what is in cultivation. A great part of the good state of the free lands in this vicinity must be attributed to this tenure; as with respect to management they are exactly on the same footing as if they had been very highly assessed by Government. The lands are held by the tenants on what is called Halhaseli; only what is cultivated pays, and a certain rate is fixed for each crop. Many have no leases, and, where there is a lease, it merely mentions the rate. By a decision of the judge last year it has been determined that such possessions and the rates are fixed in perpetuity, a most destructive circumstance for the welfare of the country, and which should never be admitted, but on the most positive evidence of direct grant. Most of the rent is paid in money, very little by a division of crops. The average rent be 10 or 12 anas for the Calcutta bigah.

8. Suryagarha (Soorejgurh, Glad.) seems originally to have been the property of a family of military Brahmans of the Bharadwaj tribe (Gotra). Govindaram, according to the family traditions, held the estate until the Fusli year 992 (A.D. 1585)

: His son Sobhanchandra to 1017 A.D. 1610

His son Harihar to 1040 A.D. 1633

His brother Damodar to 1056 A.D. 1649

His son Lakshman to 1078 A.D. 1671

His son Jagan to 1121 A.D. 1714, but succeeding when a child, his uncle Malla managed for the first ten years.

His son Phul to 1143 A.D. 1736. He had two sons, but both died before himself. His cousin Jivan, son of his uncle Bangsi, second son of Lakshman to 1163 A.D. 1756

His nephew Bodh, son of his brother Chandramohan, until 1189 (A.D. 1782).

Bodh had four sons, Udamanta, Maniyar, Dilip, and Nusib. Udamanta died before his father, but left a son, Durgavijay, who now possesses the estate, according to the family custom of primogeniture; but his kinsmen, according to the regulations, are claiming a share. The chief Zemindar now retains the entire management of 21 manors (Mauzas), and has the property of 11 more; but to these are attached seven vassals (Melks) whose fathers, according to them, being clowns, allowed the opportunity of being freed from vassalage to pass, and were partly deluded by the fair promises of the Zemindar, and partly deterred by difficulties thrown in their way by the native assistants of the Collector, who, they allege, were bribed. Three of the seven manage, as I have described in Sulimabad, and are trying by a suit in court to recover independence; the other four allow the Zemindar to manage, and take 10% on the collections.

The dependent owners (Maleks) of about 20 Mauzas knew how to avail themselves of the offer of independence made by Government. About an equal number are half free (Eltumga), half assessed (Nizamut), each village containing a portion of each kind. The free lands are managed by Maleks, as mentioned in Sulimabad, and some of these manage part of the assessed lands, while others of these are managed by the owners. The owners are numerous. It is said that many of both these and of the persons who hold the free parts are pretenders, and have no right.

The leases are from 1 to 5 years, and only what is cultivated pays; but the rate of rent is not ascertained by

the nature of the crop, but by the quality of the soil, and varies accordingly from 12 to 30 anas a customary bigah or from A. 6.  $7\frac{1}{4}$  g. to 15. a  $17\frac{1}{2}$  g. Calcutta measure. Rice land is lent by a division of the crop, and when the rice does not fail, the average rent may be from 12 to 14 anas a Calcutta bigah.

9. I have already mentioned somewhat of the history of Abhaypur (Abhypoor, Glad:) which originally was a part of Kharakpur, let to 6 vassals (Melks). In a forest at Moulanagar there dwelt a Fakir named Saiud Nuzumuddin Ali, who had 12 bigahs of land, and gave a cowrie to every one who came to beg. When Mahabut Jung, Subah of Bengal and Behar, passed on some warlike enterprise, he heard of the Fakir's sanctity, and vowed, if he had success, that he would grant a set of instrumental music (Nahabat) and a clypsedra and bell (Ghari) to the Monument of the saint (Pir), whom the holy man worshipped. The Fakir prayed; the nobleman was victorious, and he was not unmindful of his promise. The good man naturally enough reminded the warrior that the offerings would be of no use without musicians and astrologers, and that these people would eat. Abhaypur, then mostly a forest, was granted for the purpose, and put under the management of the Fakir, who was succeeded by his son Golam Moula, who left 3 sons and 2 daughters, each of whom had a share.

Golam Mostufa, the eldest son, died leaving his share to his 3 sons; 1st, Velayet Hoseyn, who died leaving Muhammed Hoseyn and a daughter; 2nd, Kurimbuksh still alive. 3rd, Ahamud Hoseyn, still alive, but most commonly called Mohan Babu, a Hindu name.

The second grandson of the holy Fakir, named Golam Mortuja, is now alive, and is considered as the head of the family.

The third grandson Golam Hoseyn, is still alive.

The six families of vassals, who held the estate when transferred from Kharakpur, were all military Brahmans, and have branched out into many proprietors. Golam Hoseyn says that they have only a right to  $7\frac{14}{16}$  per cent. on the net proceeds of the estate, with  $\frac{1}{4}$  of the house rent; but they pretend that they have a right to  $1/11$  part. In order to avoid disputes the

Fakirs used formerly to grant short leases to their vassals, for a fixed sum; but of late the vassals pretend that these leases were in perpetuity, and refuse to account for any more. The Fakirs, however, this year have given a lease to one man for five years, he agreeing to pay them 11,000 R. a year, and to bring the vassals to account, for which reason the vassals were exceedingly clamorous. The estate, owing to this high assessment, although nominally free, is in very good condition, except in being overwhelmed with useless plantations; and the rents are high, being 1 R.  $7\frac{3}{4}$  A. for the bigah good and bad of money rent, which is at the rate of  $12\frac{1}{2}$  anas the Calcutta measure, and about a quarter pays by a division of the crop.

10. Pergunah Munger (Mungeer, Glad:), in a rental procured from the Collector's office, seems to comprehend both Haveli Munger and Sakharapali, mentioned as separate in the list of free lands furnished from the same. The whole is contained in the division of Munger, and may amount to 113 sq. miles, of which 15 may be sand or water, and 2 rocks, leaving 96 sq. miles of land fit for the plough. Some of this is rather light, but a great deal is very fine. It would never appear to have belonged to any one Zemindar, and at present is divided among a vast many petty proprietors, some of old families and very civil men, but all mere peasants in their manners and education. The Company retains in its own possession some fisheries and bazars, not at all productive. The whole, as above stated, may amount to 1,84,300 Calcutta bigahs, of which 37,300 (customary bigahs 19,737) are free. Besides, the invalid establishment has 6,402 of its bigahs, equal to 12,000 of the Calcutta measure. About a quarter of this is the Company's property, and the remainder has hitherto produced little to the Zemindar, so that about 1,24,000 bigahs, good and bad, have hitherto paid the assessment, which is Rs. 17,100, or one Rupee for a little more than 7 bigahs; but most of the free and invalid land, being on the continent, where the soil is best, and the Zamindars having a large portion of the light sandy soil on the islands, fit only for tamarisks and reeds, the proportion of good land which they have for each rupee

is smaller than what I have above stated, and except this poor land almost every possible inch is cultivated, as at least 1,40,000 bigahs Calcutta measure is occupied. But the Zemindars have abundant profit, for the garden ground near Mungger, as I have before mentioned, lets at from 7 to 9 Rupees a customary bigah, and the average rate of common fields seems to be 2 rupees, equal to about 17 annas for the Calcutta bigah; while the tenantry have about them more comforts than in any part of the district that belongs to Behar.

## PART II.

### OF THE ESTATES SITUATED IN THE PROVINCE OF BENGAL.

11. Tappa Belpatta, originally a part of Virbhumi, on the sale of the Raja's estates, was purchased by Uttam Kumari, his widow, who is a sister of Raja Kaderali. She is a lady much to be pitied, as her husband's irregular and dissolute conduct prevented her from living with him, and his extravagance has ruined the family affairs. Belpatta is however a fine property situated in the southern corner of the district, and of the division of Lakardewani, and formed a part of Serkar Orambar (Oudumber, Glad:) but neither it nor Virbhumi are mentioned in the Ayeen Akbery. Mr. Cleveland settled in perpetuity, and free of rent, a part of this estate on three hill chiefs of the southern tribe, but I have included this along with their other lands, as it pays no rent and is intermixed with their hills. The lands now belonging to Belpatta amount to 201 manors (Mauzas) and may be in extent 4,45,000 Calcutta bighas, of which 59,000 may be hills, rocks, channels or otherwise unfit the plough; 3,82,000 may be capable of cultivation, and 1,58,000 may be occupied.

24 Ghatwals of the establishment kept for repressing the mountaineers are said by the Suzawul to have 3,107 bigahs of the customary measure, equal to 3,930 of the Calcutta standard, but the Ghatwals themselves say that they know not of any lands, which are theirs, or rather the Company's. In fact they seem to have been induced

to relinquish these lands, and the plan adopted seems to have been as follows—Each Ghatwal received a share of the Belpatta estate, for a certain fixed sum, for a certain number of years, and manages it as he pleases, mixing the whole lands together, and confounding the public and private property. These Ghatwals have thus become Mostajers or great tenants, but there are many others on the estate, and when their leases expire the Zemindar now changes the Ghatwals, just as she does her other Mostajers; but, when required, they furnish the Suzawul with some armed attendants. These Mostajers are exactly on the same footing with those of Hangrwe. The whole free land does not exceed 40 bighas, and no village establishment is kept, except a few Gorayits or persons to attend the Mostajers, each being allowed from 5 to 12 bigahs of land. The whole is let to under-tenants at rack rent, for short terms of years. Low rice land near rivers pays usually about 1 Rupee a bigah. Narrow strips of rice land, winding among swelling ground, pay about 12 anas, and high land unfit for rice pays about 6 anas. By far the most part of the cultivation consists of rice, and the three rates above-mentioned amount on the Calcutta bigah to  $12\frac{1}{2}$ ,  $9\frac{1}{2}$  and  $4\frac{3}{4}$  anas. All that seems wanting in the management of the estate would be to grant the Mostajers leases for life, as an encouragement to induce them to improve the country. The Rani, or her advisers, deserve great praise for having introduced so much good order and economy, especially as she has had no necessity imposed on her, the assessment being 487 R. a year.

12. Sultanabad is another estate belonging to a lady, situated in the same Serkar Orambar, and not mentioned in the Ayeen Akbery. In my account of the southern tribe of mountaineers I have mentioned that 2 Rajputs, named Aku and Paku, coming to this part of the country, the latter united himself to the highlanders, while the former obtained Sultanabad. According to the family traditions, he was succeeded in a direct line by Bara Ray, Hangs Ray, Kusal, Darbar, Khosal, and Garjan Singha, who was killed during a plundering expedition, leaving no children. His widow Sarbeswari succeeded, but in the Bengalese year 1189 (A.D. 1782).

having been accused of robbery, the family failing, and having been convicted, she was confined for life, and died in the year 1807. In the year 1792 Mr. Speke, then Governor, bestowed the estate on Mahakum Ray, son of Kalyan Singha by Anupa Bai, a daughter of Darbar above mentioned. Mahakum dying without children, was succeeded by his widow Maheswari, now about 36 years of age. She cannot read; but is said to be attentive to business and to live in a decent manner.

The estate is large, and naturally valuable; but by far the greater part of it is one uninterrupted forest, and the cultivation is confined to the N.E. corner, where there is a fine tract of land in tolerable condition. The whole may amount to 370,000 Calcutta bigahs, of which 29,000 may be rivers, hills and barren land, and 44,000 may be occupied. The Ghatwali establishment for repressing the encroachments of the mountaineers, has 3,107 customary bigahs, equal to 3,030 of the Calcutta measure, of which about  $\frac{3}{4}$  are occupied. The officers, here called Thanahdars, complain that they have been strip by the Zemindar. The invalid establishment possesses 1334 of their bigahs, all the property of the public. These are equal to 2,520 Calcutta bigahs, but almost the whole is waste. The agents of the Zemindar allege that there are 10,000 bigahs of free land, but this is highly improbable, the whole quantity registered in the Bengalese part of the district being proportionably small. The assessment amounts to 12,722 R. a year, to which alone can be attributed the bad state of the lands, as in many respects the estate is well managed. The agents, after deducting the foregoing lands, grants to servants, and land reserved for the lady's own use, allege that only 12,740 bigahs, customary measure, are rented. Rich rice land (Keingchai) pays from  $1\frac{1}{2}$  to 3 R. a bigah; high rice land of an inferior quality (Karach) pays from 12 annas to 2 R.; low rice land of an inferior quality (Jala) pays from 1 to  $2\frac{1}{2}$  Rupees; Ukri or swelling land, unfit for rice, pays from 12 annas to 2 Rupees. The bigah is 79 cubits, a mere trifle less than the Calcutta standard. The soil is remarkably fertile, and is watered from tanks, the high rents having produced

great industry, and it is here alone, and in the adjacent estate of Amar, that wealthy farmers, with brick places of worship, are to be seen. None of the rents are farmed. The leases are in perpetuity, and both extent and amount of rent are mentioned, but there is no regulated rate, or maximum.

13. Pergunah Ambar is a similar estate in Serkar Orambar, and not mentioned in the Ayeen Akbery. At the time that book was composed, the whole of these parts were probably a forest, occupied by rude tribes, that had not been reduced. By far the greater part, after once having been cleared, has again fallen into a wild state, and cultivation is almost entirely confined to the parts east from the Zemindar's house. Anantaram Sahi, a Kanoj Brahman of the Saryuriya tribe, was the first Zemindar. He had no son, but was succeeded by his nephew, Ayodhyaram. He left a son, named Baidyanath, who had two sons, Deviprasad and Prithwichandra. The former died without sons, and the latter enjoys the estate. He is a good-looking, middle aged, prudent man, exceedingly civil, and his house is more respectable than that of the Raja of Kharakpur, although his other expenses are moderate. He is said to have made a considerable progress in Hindu science; but the vain delusions of the Agam have chiefly engaged his attention. The whole estate may contain 2,24,000 Calcutta bigahs, of which not above 8,000 are unfit for the plough; and the greater part is rich. The Ghatwali establishment has 1146 bigahs, mostly waste. The whole occupied land is about 84,000 bigahs, of which, according to the Zemindar,  $1/16$  may be free, so that the Zemindary lands, at present occupied, may amount to about 78,000 bigahs; about  $3/5$  of this are high land, like Sultanabad, and is divided into three qualities. The first is let at from R.  $2\frac{1}{2}$  to 2 a bigah, the second from  $1\frac{3}{4}$  to  $1\frac{1}{2}$  R., and the third from 16 to 8 anas. The bigah is of the same size with that of Sultanabad. About  $2/5$  of the cultivated land are inundated, and let from 2 to 8 anas a bigah. The leases mention the extent and the amount of rent, and are considered as perpetual, although this is not mentioned. New tenants make the best bargain that they can. Every year some lands are deserted. This

seems owing to the lowness of the assessment, which is only 8415 R. a year.

14. Bahadurpur has been mentioned in my account of the estates of Puraniya (No. 22) and the Eunoach, Basantali Khan, mentioned there, possesses a considerable portion that is in the division of Rajmahal, and manages it in the same manner as what he possesses on the opposite side of the river.

The part of Bahadurpur called Turuf Jongka, of which I have given an account in the Puraniya papers, contains some land in the division of Rajmahal, belonging in fact to Torabali, but in the public record it is written in other names, and is called Duriyapur.

A portion of Jongka, that has been sold, according to the public records, has been purchased by Ramnidhi, Ramchandra, and Ramlochan. The former's brother was husband of two ladies, Gauri and Karunamani, who have made many purchases, and this is probably one of them.

A portion called 8 anas of Bahadurpur, and containing six Mauzas in the division of Rajmahal, has been purchased at public sale by the two ladies just now mentioned, but has been entered in the public records under the name of Giridharilal, etc.

The same ladies have purchased by private sale a part of the same estate called Turuf Marsachandi, part of which is entered in the above man's name, and part in their own.

The same ladies have also purchased another portion of the same estate called Humidpur, which is situated in Rajmahal. They have in the purchase joined to them a certain Ramlochan their brother-in-law, etc.

Another portion of the same village Humidpur, with Harispur, belong to Sheykh Ramzani Waldah and Hamshirah Hafezullah.

15. Pergunah Sultangunj has been mentioned in my account of Puraniya. (No. 23) and a small corner extends to this side of the river at Phutkipur, and belongs to Jagannath Awasti, already mentioned with the credit due to his laudable exertions.

16. Pergunah Kakjol, mentioned in my accounts of Dinajpur (No. 79) and Puraniya (No. 26) contains a

great extent in this district, where the owner of one half share acknowledges his having about 1,03,000 bigahs. Having here met with the representatives of the two branches of the family, both very obliging persons, I learned somewhat more of their history. Ghanasyam, when he returned with the name of Abdulah from Dilli, found himself in considerable difficulty. His whole kindred ran away, partly owing to aversion at his apostacy, and partly from fear that he would punish their injustice. Some time however afterwards he persuaded them to return, gave them the family God, and settled on them a small estate free of rent. The Moslems on this account shunned the convert, nor could he procure a wife. He therefore built the Abdullah Musjed at Rajmahal, and gave the faithful a great entertainment, which won their hearts. On the same day he saw a Hindu girl dedicated to the service of God (Yatini), and being smitten by her beauty, he seized her by force. Afterwards he legally married a Muhammedan's daughter. By the Yatini he had his eldest son Kurimullah, whose descendants, on that account, are considered by the other branch as illegitimate, although the son obtained half of the estate. The second branch also allege that Kurimullah adopted Amawllah, and that this person married the widow of Abdullah, his brother by adoption, another on the family. By his brother's widow he had Sayefullah, and by another concubine he had Badullah or Ebadutullah, who was the elder, and took the whole estate. He left it to his son Habibullah; but in 1207 (A. D. 1800) Sayefullah the uncle complained, and obtained one half, after a regular appeal through the 3 courts, which took up 9 years. During this time part of the estate was sold, by public sale, for the arrears of revenue, and the expense of the suit compelled him to sell the remainder to the lady named Rahatun Nesa, whom I have mentioned in my account of Puraniya, and who now holds a considerable part in this district. Sayefullah the uncle, having obtained his share, left it to his son Ommayedullah, a good looking young man, about 20 years of age, who can transact business both in Persian and Bengalese.

In my account of Puraniya, I have mentioned the succession of the younger branch of the family, now

represented by Imambuksh, to whose succession the elder branch objects several female descents; but he possesses one half of the estate, and is a shrewd man. He and Rahatun Nesa, who purchased half of the estate of the elder branch, unite in managing their estates here in common, which saves the expense of a double management.

The purchasers of lots of this estate, being persons of note, shall also be mentioned.

The Subah of Bengal, Nawab Jonabali, has one Mauza, the chief market place in Rajmahal.

A kinsman, the Nawab Mudaruk ud Doulah, has a bazar, and resides in Rajmahal, on a monthly allowance of 6,500 R. About his residence there is nothing that bespeaks it to be the abode of a person of rank. The whole of his great income seems to be frittered away among a host of dependants, all equally miserable.

Two Mauzas belong to Saiud Ayenuddinali Khan and Asgurali Khan, who reside on this property, and are persons of distinguished rank.

Another portion belongs to Jagat Seth, the great banker.

Another portion belongs to Kazi Mozuffur Hoseyn.

Raja Bazar of the Pergunah belongs to Raja Kalyan Singha, son of Pratap Singha, son of Bahadur Singha, son of Sabet Singha, son of Ray Singha, the 3rd or 4th in descent from Man Singha, who once governed Bengal, and is not assessed. The owner resides at Ujjayini, and is about 36 years of age.

None of these persons are mentioned in the list of Zemindars furnished from the Collector's office, owing I presume to their lands being free from assessment.

An eunuch of the Subahs, Siddi Omurali Khan, has purchased the largest share, part of Taluk Balalpur, or as it is written in the records Mutalpur, which has been mentioned in my account of Puraniya.

Gauri and Karunamani, the two ladies so often mentioned above, have purchased also a large portion, called Turuf Sangkarpur, and Mumrezpur, in their own name, that of Ramlochan, their brother-in-law, etc.

16. Pergunah Makray in Serkar Jennutabad (Puraniya No. 13) contains a small part of this district,

belonging in common to Golam Hoseyn Asguri, Omdutol Muzid, and Ramgovinda Ghosh.

17. Pergunah Deonapur of Serkar Orambar is not mentioned in the Ayeen Akbery. It has been very much subdivided, but seems originally to have belonged to a family of Banggaj Kayasthas from Chandradwip near Vikrampur, the ancient seat of the Hindu kings of Bengal. Bhawananda is the first of whom I heard, but it is said that the estate had belonged to his ancestors for 4 or 5 generations. He was succeeded in direct male line by Yadavananda, Madhusudan, Paramanda, Rupram, Sriram, Mahadev, Jagannath, and Raghunath, who retained  $2\frac{1}{2}$  sixteenths of the whole, and left them to his widow Parasmani, who had five daughters, and a male relation of her husband's. These have in fact divided the estate, but in the public records it is continued in her name.

An equal share of the estate belongs to Bhairavcharan, of the same family, son of Sambhunath, son of the Jagannath above mentioned.

One eighth of the estate belongs to Harinath of the same family, son of Hatteswar, son of Dullabh Narayan, son of Sri Ram above mentioned.

$1\frac{3}{4}$  sixteenths belong as their share to the widows Gauri and Karunamani repeatedly before mentioned. Their husband was Rammohan, son of Lalvihari, a younger son of Dullabh Narayan above mentioned. Rammohan had three brothers, all of whom had an equal share, although the whole was continued in the name of the elder, and has been continued in that of his wives. Ramlochan, one of these brothers, is alive, and is joined in several of the purchases made by the widows. Ramnidhi, the third brother, died without children and is represented by his widow, Rasmani. The fourth brother, Ramchandra, is still alive, and has a share. The widows and their branch have also purchased Bakurabad, a share of what belonged to the other branches of the family. The money with which most of these purchases have been made was acquired by Lalvihari, who was employed by some gentlemen at Murshedabad, but the widows are also very notable managers.

There was another brother of Rammohan, named Ramgovinda, but his share of 8/20 of a sixteenth is totally separated from the others.

$2\frac{1}{4}$  sixteenths of the estate belong in fact to Surya, Darpa, and Premnarayan, who succeeded to Sivanath their elder brother, but the estate continued in the name of the dead man. He was of the same family with the other owners of Deonapur, being son of Khosolram, son of Kasiram, son of Raghavram, son of Paramananda above mentioned.

Kasiram just now mentioned, besides Khosal, had another son named Pangchanan, whose son Sarbeswar left a portion of the estate to his son Utsah, which he enjoys in common with Radhakanta, the son of Ramkanta, who was half brother to Sarbeswar.

Raghavram mentioned before, as first of this branch of the family, besides Kasiram, had another son named Mukutram, who obtained  $2\frac{3}{4}$  sixteenths of the estate, which he left to his lineal descendants Atmaram, Vihari, and Gopikanta, the present owners.

All these Zemindars reside. The men can read and keep accompts as well as common clerks (Mohurers) but possess no sort of polite learning, and live like decent farmers. The last settlement was made in 1207 (A. D. 1800) and it was ordered that no higher rent should be taken even from new tenants than the old custom, and tenants in occupation were considered as fixed in perpetuity: but some new leases have since been granted for a short term of years; and the Zemindars should certainly be permitted to let such at rack rent. Fortunately the old rent is in general rather high, which has hitherto kept the estate in tolerable condition, but 8 large tenants have leases in perpetuity, for a great extent, at a very low rate. The best quality of land lets from 12 to 16 anas a bigah, which is only 78 cubits square, and therefore a little less than the Calcutta measure. Land of a 2nd quality pays from 8 to 10 anas, of a third quality from 7 to 9 anas, of a fourth quality from 4 to 6 anas; and the whole land pays, whether fallow or cultivated. The high castes are exempted from house rent, as are also some tradesmen, but these work for the landlord when he requires.

18. Pergunah Dashazari of Serkar Orambar is not mentioned in the Ayeen Akbry. It early seems to have been divided into two shares, called the six and ten anas or sixteenths. The former belonged to Bikal Ray, an Uttar Rarhi Kayastha, and the latter to Hemnarayan. These two had a great battle, and would not pay any revenue, on which account Mr. Cleveland seized the estates.

Mr. James Grant restored the 6 anas to the heirs of Chintaman, brother of Bikal Ray. Chintaman had three sons, 1st, Sahebram, who died without sons; 2d, Ayodhyaram, who left a son named Chunilal, 3d Ballabikanta, who left a son named Kabinath Das, the two cousins possess the estate in common, but the name of the dead man, Ballabukanta still continues in the records. The estate at that time was measured, and the rent fixed in perpetuity at from 6 to 8 anas a bigah in high rice land (Rarh) and from 4 to 6 anas for what is inundated, cultivated or waste. The bigah is rather less than the Calcutta standard, and the land is tolerably occupied.

The ten anas share belonging to Hemnarayan went to his son-in-law Chandramohan Ray, who sold it partly to Mir Shurakuti of the family of the Subah of Bengal, and partly to Kanta Babu, the private agent (Dewan) of Mr. Hastings.

Mir Shurakuti obtained only five manors (Mauzas) which he sold to Sahebram Saha, who sold them to a Rajput named Jaysivaram, who now possesses them; 15/16 are occupied, and he lets the low land at from 8 to 10 anas the small bigah, and the high at from 12 to 16, and no deduction is allowed for fallows.

The Dewan procured 40 manors (Mauzas) which with his other immense estate went to his grandson Harinath Kumar, and his revenue is paid at Murshedabad. Although he took 40 Mauzas he pays only 1063 R. a year, while the share of five Mauzas pays 765 R. and 11 Mauzas that form the other share (6 anas) pay 1,140 R. His estate however has been so ill-managed that the profit is not great. Kanta Babu measured it and fixed the rents in perpetuity, in the high land at from 4 to 8 anas, and in the low lands at from 4 to 6, and what is not cultivated pays nothing. The rents have been farmed to the owner's mother, and refarmed by her

to a man who declares that he loses, as no one will take lands on which so little value has been placed ; 25 of the 40 Mauzas, he says, have been totally deserted.

19. Kasemnagar and its history have been mentioned in my account of Puraniya (No. 24) and Krishnadev possesses about the same quantity of the estate here (5 Mauzas) that he does in that district. It is well cultivated, like his lands in Puraniya pays a good rent, and produces rich crops. Houses pay 2 R. 14 A., gardens, 1 R. 14 A., the fields pay only when in crop, but many of them give 2 crops in the year, and pay for each, so that the rent amounts to from 8 annas to a rupee for a small bigah.

A portion of this estate (4 Mauzas) has been purchased by Sahebram and Ramlochan. They allege that of 11,000 bigahs they have little more than 2,500 cultivated, the rates being from  $1\frac{1}{4}$  to 5 annas a bigah.

21. Chaknadiya is a Pergunah of Serkar Orambar (Chounknudya, Glad :), which originally belonged to a Kaibarta family, but Nandaram, the present representative, possesses only 6/20 of a sixteenth share. The remainder of this estate has subdivided into six shares, some of which have again subdivided into as many more. With regard to these it must be observed, the owners are so discordant, helpless and ignorant, that Bahadur Singha, brother of Devi Singha of Murshedabad, who possesses 3/20 of a sixteenth as a vassal (Muzkuri) and who ought to pay his rent in small portions to each branch of the owners, eludes the whole payment. The owners say that he is a very powerful violent man, with whom they dare not contend. In the public records one of the shares is said to belong to Tinkauri, etc., but this is an assumed name, the proprietor being Kaliprasad Das. The estate is in very good cultivation. The high lands are rented at  $2\frac{1}{2}$  R. 1 R. and 10 annas, according to three qualities. The low lands pay according to the kind of crop, as in Krishnadev's part of Kasemnagar.

22. Manggalpur (Mungelpoor, Glad :) is a Pergunah in Serkar Orambar. The original proprietors, of the Medical tribe, have no doubt possessed it for a very long time, and claim a descent from the Hindu kings of Bengal; but the present members of the family

have become mere peasants, and in their accounts confound all chronology and probability.

One of them told me that he was the 25th in descent from Manggal Sen, who married a daughter of Lakhyon (Lakshman) the king. This Manggal having gone on a pilgrimage to Banaras and other holy places, when he returned found his estate in possession of a Tiyur, whom he had left in charge, but who refused to deliver up the land to his master. On this Manggal applied to Hoseyn (one of the last Muhammedan kings of Bengal) who first sent a few troops, but these failed. The king then sent an army, but the Tiyur, being a very holy man, all his people that were wounded were put in Jivatkunda, which I have mentioned in my account of the topography, and became immediately sound. The army of the king, destitute of such resource, was of course repulsed; but the king, having discovered how affairs stood, contrived to have a piece of beef thrown into Jivatkunda, which thereby lost its virtue, and the Tiyur and his whole kindred vanished. Manggal then recovered his estate, and was followed in lineal descent by Kamalakanta, Umakanta, Gadadhar, Yagneswar, Baneswar, Kripanath, Nilkantha, Garuradwaj, Udaynarayan, Harekrishna, Dindayal, Khargeswar Durgabar, Ramchandra, Lambdar, Vasudev, Sundaram, Pangchanan, Jayram, Radha-krishna, Rameswar, Nehalchandra, Krishnaprasad, Mohan Ray, my informant. All persons of the family take the name of Sen. Another descendant of Manggal Sen says that his ancestor received the estate in the 624th year of the Bengal era (A. D. 1217). He considers his ancestors, the Hindu kings of Bengal, as having been mere governors (Vazirs) for the Muhammedan kings of Dilli, having no idea that there ever was any other governing power. He has the same story concerning the Tiyur, but does not know the Muhammedan king's name. As I have said in my account of the topography, the Tiyurs were probably the original princes of the country, and were expelled by the medical tribe, when these seized on Gaur. The family records are said to have been lost during the Marhatta invasion.

The estate has been mostly alienated, and what remains is called Turuf Mahesali. The family has separated

into three lots. One belongs to Mohan Ray above mentioned, and four kinsmen, who manage in common. The second belongs to Dipnarayan, and several kinsmen. The third share belongs to a Kasinath.

Turuf Sherpur of the same estate has been sold to Hitnarayan, a scribe of Puraniya.

Turuf Dapahar has gone to a family of Rarhi Brahmans of Malati, in Virbhumi.

Turuf Bhabki belongs to another family of Rarhi Brahmans, which resides and has divided into two branches, represented by Kalikaram and Kshemchand.

A portion of this Turuf called Banggi belongs to a Sivanarayan, who resides.

Turuf Angchilpara belongs to Sucharucharitra, widow of Suryanarayan, the register, for 10/16ths of Bengal.

Turuf Shahpara belongs to Ramkanai and Krishnagovinda, nephew and uncle, who are scribes, and reside.

By far the greatest lot of the estate, called 6 sixteenths of the whole, belongs to a Brajanath Singha, who was a writer in the service of Mr. Speke. He purchased from a barber, who had purchased from Jayram, one of the original family.

One half of this estate has been taken by the invalid establishment. The remainder is in good condition. The rents are nearly on the same footing as in Chaknadiya.

23. Garhi (Gerhy, Glad:) is a very large estate mentioned in my account of Puraniya (No. 28), where I have given its history, and explained the wretched management. It only remains to mention the extent and condition of what belongs to this district, where it is commensurate with the division of Paingtli, the village of that name alone excepted. The Tappa Madhuban, which belonged to the family, has long ago, as above mentioned, been alienated, and Garhi on this side of the river is partly situated in Behar, and partly in Bengal, but for the sake of connection I treat of it in one place. The owners allege that they have about 96,000 bigahs of 90 cubits square each, but this requires some explanation; for what belongs to this district, from its extent on the map, after deducting rivers, marshes, sands, hills and

other barren places, does not contain above 60,000 such bigahs, or 75,000 of the Calcutta measure. It must be observed that a great part of this estate is situated on islands in the Ganges, disputed between this district and Puraniya. The boundary, which I drew, leaves part of the islands to the one, and part to the other district, but the owners reckon the judicial department of the whole islands to belong to this district, and pay the whole revenue to Puraniya. This will account for the difference. In 1213 (A. D. 1806) about 36,000 customary bigahs, which were considered as all that paid revenue to the Collector of Bhagalpur, were sold for arrears of rent, and purchased by Bhagawan Datta, then Shereshtadar of the court. He gave 1,800 R. and sold his bargain for 2,400 R. to Brahma Das, a Gosaing of the Nanak sect, who resides at Puraniya. His share, although called 36,000 bigahs, probably exceeds that very much, as the other share of the estate, which is said to contain 60,000 bigahs, and pays its revenue to Puraniya, so far as I could learn, contains about 110,000 bigahs partly on the Puraniya side, partly on the islands. The Ghatwali establishment has 6806 bigahs leaving at least 30,000 to the Zemindar. The free land is a mere trifle. Of the Ghatwali lands 427 bigahs are cultivated. Of the assessed about one half, or 15,000 bigahs, which should not be let at less than 12 anas a bigah, good and bad; but the rates are very miserable, mostly from  $1\frac{1}{2}$  to 4 anas; some however rise so high as eight, and none of the deductions usual in the other portion of the estate are made to the tenants, on which account it is not quite so bad. A man has farmed the rents for 1404 rupees a year, but the principal, being a silly creature, allows a deduction of 409 R. for the expense of collection, and 225 R. for repairing roads, and defraying the exactions made by European travellers, who are fleeced by at least 100 per cent. on all that they purchase. Last year the owner received 770 R. which, after deducting the revenue (458 R.), left only a profit of 312 R. or 13 per cent. for his money.

44. A small portion of Enayetpur, mentioned in my account of Puraniya, as a division of Akburnagar, is situated in this district, and belongs to a Mir Saiudali,

25. Of Pergunah Akburnagar, mentioned in my account of Puraniya (No. 27) a portion called Jayrampur is in this district, and belongs to Saiud Akburali and Sultan Shurifun Nesa.

Another portion of the same Pergunah called Sobhapur belongs to Janakiram of Aurungabad.

Another portion of this estate belongs, free of rent, to Gajaraj Singha. In my account of the estates in Pergunah Bhagalpur I have given a history of this person, the proprietor of Manihari. It now remains to mention the lands which he possesses in the Rajmahal division of the district, which compose what is called by the family the Munsub Jaygir. The great extent of this, its natural riches, and the miserable neglected state into which it has fallen, show how much the charity of the Company is misplaced, in giving a monthly pension to this family. It is true that both brothers are idiots, and are in no manner to be blamed for the mismanagement; but their kindred, who have the entire direction of the free estates, should be compelled to give an account, and the pension should be immediately withdrawn, as being only an encouragement to idleness. When it was granted, there was a sort of plea, the family having been reduced by the incursions of the mountaineers, but even then it possessed the Pergunah of Dursuraf in Puraniya, free of rent, and where no disturbance had been. The land which this family possesses free of rent, in the division of Rajmahal, consists of the greater part of four Pergunahs, which are of vast extent; but it would appear are only rated in the public records at 25,397 bigahs, which is probably all that in reality is the family right, and their claims therefore deserve a serious investigation, as their lands are daily becoming worse and worse.

Tappa Chithaliya of Pergunah Akburnagar, which occupies all the lands near the hills west from Rajmahal, by the people is said to extend 3 coses N. and S. and 4 coses east and west, and may perhaps contain 30 square miles. When granted to the ancestors of Gajara, it was valued at 545 R. a year. The Ghatwali establishment has here 1902 bigahs, of which 1260 are cultivated, and this is almost the whole of what is now occupied.

26. Perunah Yamuni extends from Sandanata, the boundary of Paingti, to Atapur in the town of Rajmahal, and is reckoned 7 coses long from north to south, and 4 coses wide from the main channel of the river to the hills, but this seems to me an exaggeration very usual among the natives. In fact these are about its greatest dimensions; but it forms nearly a right angled triangle, the two sides including the right angle being 14 and 8 miles, from which its extent will be 72 sq. miles. The whole extent therefore of these two Pergunahs will be 102 sq. miles. Almost 169,000 Calcutta bigahs, and rather more than 207,000 of the customary measure are fit for the plough; but the Ghatwali establishment has 476 bigahs, and the invalid establishment has taken a great deal. I believe that both the establishments at Sakarigali and Sagrampur have their lands form this estate, amounting to 12,110 of the invalid bigahs, of which 8,92 belong to the public, reducing the free estate by about 16,000 bigahs Calcutta measure. One-sixteenth of the whole has been alienated in free lands; yet after all these deductions there remains a great property. Yamuni is mostly let at from 1 to 4 anas a bigah, and only what is cultivated pays, about 3/16ths may be occupied. The whole is managed by a Tahasildar, appointed by the Raja's mother. In the time of Akbur it was valued in the king's books at 7350 R. a year.

27, 28. In the two Pergunahs Majhuya and Kangjiyala, that are surrounded by the lands of the Northern hill tribe, I have estimated that there are 36 sq. miles of rich low land, in which, after making a reasonable deduction for water courses and other unavoidable obstructions, there will be at least 60,000 Calcutta bigahs of arable land, and in the reign of Akbur, when the family obtained possession, they were valued in the king's books at 4,635 R. a year. The Ghatwali land in Majhuya amounts to 6,822 bigahs, of which 904 are cultivated, and in Kangjiyala to 2,265 bigahs, of which 1,505 are occupied. This is the only cultivation in the whole estate, and this land belongs to the State.

Most of these estates of Zila Rajmahal that have been hitherto described are situated partly in this

district and partly in Puraniya; and the management in both districts is nearly the same, so that the general remarks made in my former account are applicable to the portion which belongs to this district.

Setting aside Paingti and the western and northern parts of Rajmahal, altogether paying 458 R. a year for above 150 sq. miles of arable land, in a most wretched condition, and setting aside the vast extents of Belpatta, Sultanabad and Ambar, which have been particularly described, there will remain, in what is here called Zila Rajmahal, about 292 sq. miles of arable land, lying between Rajmahal and Junggipur, two of the most capital piaces in Bengal, and having a constant and ready market for every commodity. This extent, including all the south of Rajmahal, Phutkipur, and Aurungabad contains about 574,000 customary bigahs, a trifle smaller than the Calcutta standard: but 34 000 of this measure belong to the invalid establishment, which has hitherto produced little to the Zemindar, although they retain the property of about a half; about 17,000 pay their revenue to Puraniya, and the free land may be about 21,000 bigahs, so that there will remain to the Zemindars about 502,000 bigahs, for which they pay an assessment of 33,600 R. a year, or about 1/15 of a rupee for the bigah. The rents also are too low, and accordingly I reckon that about 44 per cent. is neglected. The lands, however, of the invalids being by far the worst, may make a difference of 1 per cent. in favour of the Zemindars' exertions, so that 43 per cent. of their arable lands are waste. Their agents were all willing to show me what they called statements of their lands, but I soon found that these were mere copies of what had been shown to the gentlemen with whom the settlement had been made, and were of no sort of authority. For instance, in the portion of Rajmahal south from the town, they allowed upwards of 45,000 bigahs of free land, which exceeds by four thousand the whole free land registered in the zila, and besides this deducted on the same account six whole lots of land. At the same time they made the total amount of the land about 192,000 bigahs, while, according to the space which it occupies on the map, it cannot be less than about 289,000.

In this part of the country, a common part of the village establishment is a man to encourage the tenantry to work, or rather, by repeated exhortations and dunning to compel them to labour. Their indolence, owing to too low rents, would render this a very useful service, were it effectual ; I believe it does very little good, and the man is usually pacified by a little grain. When he has no other employment, he is called Halsahana ; but in general, in order to give him more weight, this officer is also charged with collecting the rent, and is then called Dihidar.

### PART III.

#### OF ESTATES THAT PAY THEIR REVENUES TO THE COLLECTORS OF OTHER DISTRICTS.

I have already mentioned, that a part of the revenue of Pergunah Garhi, or of the division of Paingti, is paid to Puraniya.

29. The same is the case with the estate called Pergunah Simla, belonging to Jagannath Awasti, before mentioned, as owner of a part of Sultanabad. Simla is situated mostly on the new lands formed opposite to Udhawanala, and being under the judicious management described in my account of Puraniya, is in a good state of cultivation, and the reason of the good management seems to be an assessment of 7,600 R. which the owner pays, while he says that he has only 18,000 small bigahs (79 cubits square).

A part of Pergunah Kasemnagur, mentioned both before and in my account of Puraniya, pays its revenue to Murshedabad. The nominal owner is the image Brindabanchandra, but it really belongs to Ray Jagan-nath, heir of Ray Ballabh, formerly Company's Dewan, whom I have frequently had occasion to mention. Almost the whole pays rent, and no deduction is made on account of fallows. The rents are low, from 2 to 4 anas, on the bigah of 78 cubits square; but an addition of from 4 to 12 anas on every 16 annas of that rent is made under the denomination of Abuyab. The low rates are such as are such exacted from high castes. The greater part pays 4 anas rent (Asul) a bigah, with 3 anas commission

(Abuyab), which will bring it near to 8 anas a Calcutta bigah for the whole, good or bad, waste or cultivated. Some is fallowed, but very little is waste. It may contain 5,000 of the customary bigahs (78 cubits square). About 1/64 part of it is free.

31. Chuklah Deonapur is an estate that formerly belonged to the Rajas of Nator, and may contain about 175,000 customary bigahs (78 cubits square). It has been alienated in four lots.

Devi Singha of Murshedabad took a mortgage on the greater part, along with 6 other Pergunahs, but not in his own name: he used that of Balawanta son of Bahadur, his brother. Both Balawanta and Devi having died, the estate is in the name of Ray Gopal, son of the former, but every one considers his grandfather Bahadur as the real proprietor. Gopal Ray being a minor, a nominal manager has been appointed by the Collector, but Bahadur, as farmer of the rent, manages everything. The estate may contain 122,000 bigahs, and is very fully rented. Leases were some time ago granted for ten years, and having expired, have not been renewed; but the tenants continue to occupy at the same rate. The Zemindar, however, alleges that they may be turned out at will. The lands, cultivated or fallow, are by a certain number of bigahs ( $3\frac{1}{2}$  to 6) for the rupee of rent (Hari), and a commission (Abuyab) at the rate of from 4 to 32 anas upon 16 is laid on the rent. The leases mention both the number of bigahs and the total rent (Hari and Abuyab) that is to be paid. The distinction of rent and commission seems to have been continued merely for the purpose of rendering an investigation of the accounts difficult, should an attempt be made to increase the assessment. The common tenants usually pay R. 2 Abuyab for every rupee of rent, and it is to the higher classes that a reduction is made. The rate of rent varies according to soil. A common tenant therefore in all pays from 8 to  $13\frac{3}{4}$  anas a customary bigah, or from  $8\frac{1}{2}$  to  $14\frac{1}{4}$  for the Calcutta measure. About 3/32 are said to be free.

Sivaram Singha the Rajput of Junggipur, mentioned above as owner of a part of Dashazari, has purchased about 50,000 bigahs of Chuklah Deonapur, which he

manages in the same manner, but the rents are lower. The land is however well occupied; about 1/16 is said to be free.

Ramgopal Ray, originally a Sikh, and now commissioner of Pratapgunj, has purchased about 1500 bigahs of the the same estate, for which he pays annually 127 R. not above 5 bigahs waste.

Lala Subangsala, a scribe of Rajmahal, has purchased about 1100 bigahs of this estate, for which he pays 202 R. and it is very fully occupied.

32. Pergunah Rajshahi, Serkar Orambar, was one of the other estates which were mortgaged by the Nator family to Devi Singha, as before mentioned, but of this also sundry other persons shared. The portion of it contained in this district may amount to 39,000 bigahs, of which Gopal, the grand nephew of Devi Singha, may possess 26,000; but 3/32 are free.

Ramdulal, a scribe of Virbhumi, and Harachandra, a military Brahman of Murshedabad, have bought about 6,000 bigahs, for which they pay 1750 R. a year, and 150 bigahs are free.

About 2000 bigahs belong to Mir Imamuddin and Hoseyn Ali, two brothers, who reside, and to their sister Mano Bibi, who lives in Virbhumi; 250 bigahs are free, and they pay 1329 R. as land tax.

Visweswar Ray, another scribe of Virbhumi, may possess about 1000 bigahs of which 25 are free.

Jayram, brother of the Rajput of Junggipur, mentioned as proprietor of part of Dashazari and Chuklah Deonapur, has about as much, but 250 bigahs are free.

About a similar quantity, called Baharampur, belongs to Saiud Furzundali and Bukhshali of Belghatta in Murshedabad, and pays 50 R. a year.

The whole is very full occupied, and is managed in the same manner as in Chuklah Deonapur.

33. Bedrabad is a small estate, which belonged to the (Kanungoe) register for 10/16 of Bengal, and in the division of Pratapgunj may contain 12,000 customary bigahs (78 cubits). The greater part belongs to the representative of the family, Chandranrayan, and the rents have been farmed, and refarmed. The estate is managed in the same manner as Chuklah Deonapur, and

## 570 SULTANPUR, AURANGABAD AND ROKUNPUR

the rents are high. It is very fully occupied ; 1/16 has become free.

A small portion, only 850 bigahs, has gone to Krishnadev Ray, mentioned before as owner of part of Kasemnagar; 100 bigahs are free, and he pays 169 R. a year.

34. A small portion of Pergunah Sultanpur Wojiyal (Sultanpoor Owjeal, Glad;) containing about 1000 small bigahs, is situated in the same division, and belongs to Rahimunnesa Begum, daughter of the Nawab Mubarukud Doulah, late Subah of Bengal.

35. Aurunggabad village in the division of Pratapgunj is the property of the Company, and is one of what are called 22 Gunjs or markets, in a similar state. The rents are managed by the Collector of Murshedabad. There are no fields, but there are said to be 141 houses standing in the market place; 45 of them are free of assessment; the rents of the remaining 96 are farmed at  $62\frac{1}{2}$  R. It is said that the renter only collected  $164\frac{1}{2}$  R. and kept one agent at 3 R. one messenger and two watchmen at 2 R. each a month. The expense therefore of collecting  $163\frac{1}{2}$  amounts to 108 R. a year. All statements however of expense of collection in the Bengalese parts of this district must be received with great distrust. None of the Zemindars' agents would be satisfied without its being taken down at full length, whereas in most other parts it is carefully concealed. It would seem that when the settlement was made, the expense of collection had been stated as enormous, and admitted, and the Zemindars now imagined that they should always have credit for the same.

36. Pergunah Rokunpur is mostly situated in Dianjpur (No. 71) but a small portion is in Puraniya, and a small portion in the division of Furrokhabrd belongs to Bhagalpur, but pays its assessment to Murshedabad and has been divided into four lots.

Of these the representative of the family of the register of 10/16 of Bengal retains one, which may contain near 3000 customary bigahs, of 79 cubits square.

Ramgopal Ray, the Sikh mentioned as owner of a part of Deonapur, possesses about 3,700 bigahs, for which he pays 253 R. a year.

About 700 bigahs belong to a Fayezullah Beg.

About 700 bigahs belong to the Nawab Mudaruk-ud-doulah of Rajmahal for a burying place. He pays no revenue, and the whole consists of three villages containing a good many houses, but no fields.

These lots of this estate are very well occupied, and the leases are on the same terms as those of Chuklah Deonapur.

37. Pergunah Furrokhabad, Serkar Orambar, is not mentioned in the Ayeen Akbery. It belonged to the register of ten sixteenths of Bengal, and his representative still retains the property of all that is in this district, amounting to about 100,000 customary bigahs (79 cubits square) of arable land. The estate is very fully occupied. One-fourth of the tenants have leases, in general such as are called Meyadi ; but no term is stated in the lease, and the agents of the landlord say, that they may be turned out at will, the intention of the lease being merely to ascertain the rent that is to be paid during occupancy. The remaining tenants have no leases ; but at the end of the year take a receipt (Farugkhut), for what they have paid, and it is understood, that next year no more rent can be demanded. The agents say that Mr. Turner, when acting judge, determined these receipts to be of no avail, and that at the expiral of the year, the landlord might relet his lands at whatever he could obtain. A contrary decision in a similar case, in the western part of the district, has been given by the present judge. The law on his point would therefore seem to be rather uncertain. There can be no doubt, that the decision of Mr. Turner is most adapted for the benefit of the country.

The rent of one-fourth is fixed on the Hari or bigah, without reference to the crop. Some of this pays a commission, some does not. Where there is no commission, the tenant gets from 1 to 6 bigahs for the rupee, all tolerable land being above 10 anas for the bigah. Where the commission is taken, the rent is from 2 to 10 anas a bigah. The commission varies from 4 anas (Seway) to 2 rupees (Tetaki) on each rupee of rent. Three-fourths of the lands are let by a certain rate on

the bigah, according to the crop with which it is sown ; and part of this also is let without commission ; part pays. When there is commission, ordinary farmers pay 2 rupees for each rupee rent, Mandals or managing tenants, pay 1 rupee on each rupee of rent, and the high castes pay  $\frac{1}{4}$  rupee on each rupee. The following are the rates where commission is exacted.

Rent and Commission.

	Rent A. G.	High Castes A. G.	Mandals. A. G.	Farmers. A. G.
Rice and Mustard China.	5 10	6 17½	11 0	16 10
Wheat, Barley, and China.	4 10	5 12½	9 0	13 10
Sesamum and Linseed.	4 0	5 0	8 0	12 0
Masur and Khesari.	3 0	3 15	6 0	9 0
Sama, Kodo, and Kangni.	2 10	3 2½	5 0	7 10

Very little produces two crops. All ranks pay house rent, in general very high, about 5 R. a bigah ; but the high castes pay only about half as much.

The owner, being a pupil, the rents have been mostly (96,000 bighas) farmed, by the Collector, to a Ramkrishna Chaudhuri ; but on the estate he is not looked upon as having anything to do with it, and Bahadur, the brother of Devi Singha of Murshedabad, is looked upon as the manager ; again he has farmed his bargain, so far as appears on the face of the agreement, made however in the name of Ramkrishna, to Kamalnarayan ; but among the tenants this is considered as a mere nominal transaction, and they consider as the real under-farmer, the widow of Suryanarayan, the last Zemindar, and this lady is the mother by adoption of the Chandra the present owner. She has relet the concern to two partners, one named Samanta Singha a Rajput, and the other really named Rup Singha, a Jat ; but he is commonly known by the name of Than Singha. These partners have reformed the rents of 8 Turufs to an equal number of resident vultures, and collect the remainder of the rents themselves. The whole actual managers have made an

additional charge of 1/12 of the rent, under the name of Izaradari, and  $\frac{3}{4}$  of the tenants, being poor ignorant creatures, pay this, but  $\frac{1}{4}$ , chiefly the high castes, who pay a trifling rent, refuse this addition, which is therefore in all probability totally illegal. The people are of course exceedingly clamorous, and the estate will be deserted, should not the Zemindar, on coming to age, remedy these disorders. The two partners, I am told, pay 12,500 R. a year, out of which must be deducted the revenue, and the profit of the two persons through whose hands the money passes to the owner, whose share will be small. The gross rental is nominally 15,000 R. out of which the partners are allowed 2,500 or  $16\frac{2}{3}$  per cent. for the expense of collection ; but in fact this rent, like everything about the management of the estate, is nominal, and the whole free land being only 500 bighas, and the whole being fully occupied, we cannot doubt that at least 88,000 bighas pay rent ; nor on any supposition can the real rent be less than 40,000 R. a year. Large sums, therefore, in all probability, have been received from those who actually farm the rents.

The village establishment is as follows :—

	Rs.
9 Clerks (Patwari) @ 3 to $3\frac{1}{2}$ a month	.. 351
9 Agents (Gomashtahs) @ 4 to $4\frac{1}{2}$	.. 462
9 Surveyors (Amins) employed 4 or 5 months .. 162 @ 16 to 20R.	
30 Messengers (Kotwals) @ 8 to 12 anas a... 295 month.	
13 Exhorters to cultivation and collectors.. 312 (Dihidar) @ 2 R.	
8 Thanadars, formerly employed in police.. 96 now used to collect money @ 1 R. p. m.	
16 Armed men (Payiks) under them @ about.. 192 1 R.	
	<hr/> 1,800

## The Head Establishment.

	R.
1 Deputy zemindar (Nayeb) 12 R. p. m.	144
1 Surveyor (Amin) @ 7½ R. p. m.	90
2 Agents with the Judge and Collector (Vakils)	132
1 Commandant of guards (Merdha)	60
5 Matchlock men (Burukandaj)	66
5 Unarmed guards (Peyadahs)	60
5 Messengers (Atpanariyas) ..	50
Boat expense and stationery ..	45

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It is evident, from the allowances of most of these being so low, that they must be supported by the tenants.

Of the other small portion of the estate, the rents of which also are farmed, 1209 bigahs are free.

38, Dehat Akburshahi of Mahal or Pergunah Khalesah, Serkar Orambar, is a detached portion of the division of Furrokhabad, situated near Gaur, and not mentioned in the Ayeen Akbery. It may contain about 10,000 bigahs (79 cubits square) and is indifferently cultivated, 5/16 being stated as waste. It pays 1,133 R. to the Collector of Murshedabad, although on all sides it is surrounded by Bhagalpur. This estate belonged to a Hedatullah Chaudhuri, who had 3 sons, but seems to have left his estate in a curious manner. One of the sons is still alive, and is married; the other two are dead, but have left widows.

The estate belongs in equal shares to the dead son's widows, and to the living son's wife, but is held in the name of Satun Bibi, one of the widows. The rates of rent are very low, from 1½ to 10 anas a bigah, according to the kind of crop, and cannot, it is supposed, be raised, but the tenant may be turned out at will, which in fact renders the maximum of no value. There is no commission (Abuyab).

The estates of Serkars Orambar and Jennutabad, that have been assessed by the collectors of Murshedabad, it must be observed have been higher rated, both to the landlords and tenants, than those which were assessed by the Collector of Bhagalpur, and, although inferior in soil, are in a vastly superior condition.

APPENDIX CONTAINING AN ACCOUNT OF THE  
AGRICULTURE OF THE HILL TRIBES.—

The southern tribes in some respects have made less progress than the northern ; in other respects they have advanced farther. Their hills are cultivated with less care, neither do they rear cotton nor *Cytisus Cajan*, which are two of the most valuable crops that the northern tribe possesses ; but many of them have adopted the plough, and use it not only to cultivate rice in low land, but to cultivate swelling grounds at the bottom of their hills, after these have been enriched by a long fallow, and have been overgrown with trees. On both the hills and swelling lands, after two crops, the field is allowed to remain waste for from five to seven years, during which the trees shoot up to the size of large coppice. In Asharh and Sravan (14th June—15th August), the men cut down all the trees on the space intended to be cultivated. In Chaitra and Vaisakh (13th March—12th May), both men and women are employed burning the dry sticks. Then in the hills, with the early rains, the women chiefly dig small holes, at little distances, by means of a stick pointed with an iron about three fingers broad ; and in each hole they put some seeds of Goronri (Maize, Jonola (*Holcus Sorghum*)) and Kalai (the kind of pulse, which in the Hindi dialect is called Bora). They then sow the surface broadcast with two kinds of millet called Kheri and Kangni. Sometimes they reverse the progress, and sow the millet first. Next year they only plant the Maize and Sorghum, after which the field is allowed another fallow. On the swelling ground the field is slightly ploughed, and in the winter between the two crops rapeseed and *Sesamum* are sown broadcast. A field of this kind is called a Vari, and every other year the cultivators move their huts to the new field. These huts are very wretched, but have near them some plantains, capsicum, and vegetables. Part of their food consists of wild yams. The pulse is reared chiefly for market, to procure them a supply of salt, iron, clothes, and finery ; but of the two last articles they procure very little. Their chief means, however, of procuring foreign articles is by making charcoal, which

would afford them an ample supply, were they not totally abandoned to drunkenness ; and in preparing drink consume a great part of their grain, so that the charcoal which they make is chiefly sold for rice.

The northern tribe is more industrious and sober, although both men and women often get very drunk. They cultivate the hills alone, and it is surprising what crops are produced on the steepest declivities, covered so thickly with loose stones that you can scarcely walk except by stepping from one to another. The field is cleared exactly in the same manner as among the southern tribe. On the two first years it is planted with a variety of articles. Small holes, two or three fingers deep, are made in the interestices between the stones ; and in each are droped 10 or 12 seeds, taken by chance from a promiscuous mixture of the following articles. Maize, called by these people Tekalo, is in the greatest quantity, and is of two kinds, one gathered in Asharh (14th June—14th July) the other in Aghan (15th November—14th December). Next in quantity to the Maize is the Naitu, which is the species of Holcus, called in the plains Gehungya Janera, and is reaped in Paush (15th December—12th January). Next in quantity is the Kusora, the species of pulse called in the plains Bora, which is reaped in Aghan (15th November—14th December). Next in quantity is the Kodom, or *Eleusine Corocanus*, which is of two kinds ; one gathered in Bhadra (16th August—15th September); the other in Aghan (15th November—14th December). Next in quantity is the Petaga or *Panicum italicum* which is gathered in Bhadra (16th August—15th September). The smallest of these articles is the Lahari or *Cytisus Cajan*, which is of two kinds ; one gathered in Paush (15th December—12th January), the other in Chaitra (13th March—11th April). Although the quantity of the last mentioned seed is comparatively small it grows so luxuriantly, that, when I visited the hills, after all the other crops had been removed, no traces of them could be discovered, and the whole fields were covered with a rich close crop of this valuable pulse. On the third year the best fields are sown with cotton, and the poor are allowed to run wild, as is also done with the best, after the cotton has been removed, and the trees are

allowed from 8 to 12 years to recover. I have nowhere seen more thriving fields of cotton, and have no doubt that its sale might procure an ample supply of all foreign commodities that these people want ; but they exchange part of their grains for rice, and supply the lowlanders with timber and charcoal. The men cut and burn the trees, make charcoal, carry this and timber to market; but pass a great part of their time in hunting. The women sow and reap. Rich people occasionally hire the poor, and give a woman two paysas a day ( $\frac{1}{30}$  part of a rupee) to plant ; but she works only until noon. At harvest she works the whole day, and will bring home from 40 to 60 baskets of ears, each giving about 3 sers (104 s. w.) or 8 lbs. of grains: for her trouble she receives one basket.

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ACCOUNT OF THE DISTRICT  
OF  
**BHAGALPUR.**

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**BOOK V.**  
OF THE STATE OF ARTS AND COMMERCE.

DIVISION 1ST.  
OF THE ARTS.

For an estimate of the number of artists I refer to the Statistical Table, No. 40, constructed on the same plain with the 37th Table of my account of Puraniya.

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## CHAPTER 1ST.

### OF THE FINE ARTS.

In the account of the topography and condition of the people, all that I have to offer concerning the state of architecture, ancient and modern, has been anticipated.

Sculpture, statuary, and painting, are on as bad a footing as in the districts hitherto surveyed.

1. The painters are employed as in Puraniya.

Of music there is an extraordinary abundance.

2. Mirasis, are a kind of dancing and musical girls who perform before Muhammedan women of rank. They are confined to Rajmahal, where there are two sets, containing five girls.

3. The common dancing girls, Bai, are much on the same footing as in Puraniya, but are rather inferior, and all profess the faith in Muhammed, except two sets, at Bhaghalpur, of the kind called Rumzani. These happen to be the best in the district.

4. In the southern part of the district, are a few sets of another kind of Hindu dancing girls, called Kheloni. They are exceeding bad dancers and singers, but endeavour to excite a laugh by trite jokes suited to the capacity of the spectators, who are easily pleased.

5. There are none of the sets of proper dancing boys (Bhaktiyas); but several boys dance and sing. Among these are the Jhumuriyas. Each set consists of two or three men, who are musicians, that beat the drums called Tabla, and Mandira, and of two boys, who dance and sing dressed to represent Krishna, and Radha. The songs relate to the amours of these deities. These sets are employed at marriages and receive about eight annas a day, and food. They are mostly weavers, and, when not employed in their musical profession, exercise the shuttle.

6. The Natuya sets are also weavers of the Jolaha tribe, and are employed as in Puraniya (No. 5).

7. The Domma Domni are confined to the eastern parts of the district, and are sets of 6 or 7 men and women, or of men dressed like women, and of very low caste, who dance and sing at great festivals, especially at the Ghetu Puja. Ghetu is a male deity who presides over the itch and other cutaneous disorders, and is worshipped in Chaitra when these disorders are much aggravated by the heat of the weather.

8. The Bhangrs are impudent fellows who make wry faces, squeak like pigs, bark like dogs, and perform many other ludicrous feats. They also dance and sing, mimicking and turning into ridicule the dancing boys and girls, on whom they likewise pass many jokes, and are employed on great occasions.

9. The regular sets of Bishaharis have been described in my account of Dinajpur and Ranggopur, and are confined to the Bengalese part of the district. In the Behar part, when the time of danger from serpents approaches, all the neighbours assemble and worship Bishahari ; those who can sing, repeat hymns in her praise, but there are no regular sets of performers, nor do the singers receive any reward.

10. The Kirtoniyas or Songkirtoniyas of Bengal have been described in my accounts of Dinajpur and Ronggopur. Here they are often called Mara-Kirtaniyas on account of their being chiefly employed in funeral rites.

11. The Bhajaniya Kirtaniyas of Behar have been described in my account of Puraniya.

12, 13. Of the Pirergayan, employed by the Moslems to sing the praises of their saints; there is only one set. At Rajmahal, however, are ten houses of Piranis, the men, women, and children of which sing in honour of certain saints, whenever any one is afraid, and hire them to perform this kind of worship, which is performed in these houses of the Pirans.

14. The Badyakars, Bajaniyas, or common musicians have been amply described in the account of foregoing districts. They are not only very numerous and very much employed, but exceedingly unskilful so that the noise is a very great nuisance.

15, 16. In my account of Puraniya the Tasawalehs and Nahabatwalehs have been described.

No woman who has any concern for her reputation, performs on any musical instrument ; but women of some low tribes sing at marriages and festivals. There are a many dissipated young men, who, in their cups, sing and beat on small drums ; but men of rank and gravity totally reject such indecorous levity.

I heard of no persons who live by singing the praises of ancient heroes.

17. The Daphalis are a kind of low Muhammedans, who beg on the strength of singing amorous ditties, accompanied by a tambourine.

18. The Nariyals are men of the Goyala and Beldar tribes, who are employed to dance at marriages, and receive a share of the feast.

19. The Bazigurs are jugglers, tumblers, and balancers, who amuse the people ; and it must be remarked, that they have fixed their residence in the wildest parts of the country. There they keep their children and old people, while some young men and girls stroll about the country, during the fair season. The girls are those who in common shew all the feats of activity, and often those of dexterity ; but in the latter they are much inferior to strollers from Madras and Dilli, who sometimes visit the country. Some of this district called Naten are of the Rajput caste.

20. The Chambas amuse the populace with tame bears and monkeys, and sometimes cut themselves before timid persons, in order to extort charity by compassion. A scoundrel at Munger, called a Gorajwaleh, procures money from such persons by threatening to run a spike into his breast.

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## CHAPTER 2ND.

### OF COMMON ARTISTS.

#### SECTION 1ST.

##### *Of Personal Artists.*

21. Washermen are nearly on the same footing as in Puraniya, some of them being Moslems and most of them little employed. A few at Bhagalpur make good wages by washing the cloth manufactured at that place.

22. The washers of shals are on the same footing as in Puraniya.

23. At Munger, the people of one house live by making a coarse soap. The house contains four persons, men and women, who in eight days can make a batch, They take one man (84 s. w. the ser) of tallow ( $86\frac{1}{4}$  lb.) worth  $5\frac{1}{2}$  R and linseed oil  $6\frac{3}{4}$  sers ( $14\frac{1}{2}$  lb.) worth 1 R. They boil these in a large iron vessel for 4 days, adding to them gradually a ley, made by filtering water through 25 sers (53 lb.  $14\frac{1}{2}$  oz.) of quick lime, worth  $\frac{1}{2}$  R. mixed with 20 sers (43 lb. 2 oz.) of coarse carbonate of soda, worth 1 R. Then the vessel is exposed three days to the sun, to dry. Next day, it is boiled again, and becomes thick, when it is made up in to balls of from  $\frac{1}{2}$  to 2 lbs. weight. The materials cost 8 R, the firewood costs 4 anas : the workmen procure  $1\frac{3}{4}$  mans (150 lb.) of soaps, worth 10 R. 11 a., so that their profit is 2 R. 7 a They have a ready sale.

24. At the same place are 3 families which live by making tallow candles that are used by the Invalids, European and Muhammedan

25. At the same place are 4 families which live by making torches of old rags formed into a roll, as described in my account of Purania.

26. In the list those taylors only have been included whose families reside, but at Munger, where much of the army clothing is made, a great many strangers

are employed. These are paid by the job and a man, working constantly, can make from 4 to 5 R. a month ; but his wife, working at home, can earn half as much. Their profits in other parts are fully higher, but their employment is not so constant. In this district there are some Hindu taylors.

27. At Bhagalpur there is one tent maker,

28. The barbers of the Bengalese part of the district, Napit, are as haughty as in other parts of that country ; but the Nais of Behar are more condescending and better operators. Among them are a few of the Muhammedan faith. They make good wages, and some, have acquired wealth, have become ashamed of their profession, and betaken themselves to the study of liberal sciences. In some parts there is a kind of surgeon barbers, called Jurrah.

29. The Helas are of a very impure tribe, the men of which extract blood by cupping and the women by applying leeches.

30. The Nat women tatoo or stain the skin of the sable belles while their men castrate various domestic animals.

31. The Missiwalehs, or makers of tooth-powder, have been previously described.

32. The most common female ornament here, as well as in Puraniya, is red lead, but the quantity manufactured is not adequate to the demand.

33. Those who make ornaments of Lac are very numerous and are here mostly Hindus. I have already stated that they are such bad economists as often to use Lac from which the colour has not been extracted, and their work is exceedingly coarse; but it is in very general use.

In the Behar part of the district, bracelets (churi) of a coarse kind of glass called Kangch, are a good deal used. In my account of Mysore, I have given the process used. There are several kinds of Kangch. The cheapest and most easily made is black, and perfectly opaque. The workman take 4 sers ( $8 \frac{664}{1000}$  lb.) of impure carbonate of soda (Sajimatti), and powder it. They then place it in the crucible of the furnace, and heat it for twelve hours, stirring it occasionally, until it

melts. They then take it out with an iron ladle, and throw it into cold water. They then powder it again, and afterwards put it into the crucible. It melts in three or four hours ; but is kept in this state all the day, and is frequently stirred with the ladle. In the evening it is taken out in ladlefuls, poured on the ground, and allowed to form cakes called Thaka. Next day, the cakes are put again into the crucible ; and, when melted, are formed into rings, as I have described in my account of Mysore. The impure soda gives  $\frac{1}{2}$  of its weight of glass.

The furance is made of unbaked clay over a hemispherical hole, that serves for a fire place. The upper part of the furnace also is hemispherical, and within does not exceed a cubit in diameter. The crucible fills the whole space from side to side, so that the flame does not reach the materials which it contains, and only envelopes its bottom and sides. Four little walls on the outside, about four inches thick and six inches deep, strengthen the outer part of the furnace, dividing it into four spaces. At the bottom of one is a hole, through which the fuel is thrown into the fire-place ; and the smoke comes out by another hole, which is formed at the bottom of the opposite space. Above this is a large hole, by which the materials are introduced into the crucible ; but this is afterwards shut by a plug of fresh kneaded clay, which can be removed to stir the materials or to take out the melted mass. At the two other sides, opposite to each other, are two apertures, through which the melted glass is taken with a rod to make the rings, a workman sitting at each. These always remain open.

Another kind of glass is greenish, and a little diaphanous. To make this the workmen take about 7 sers of the impure soda, and make it into a paste with a little water, forming it into cakes of about  $\frac{1}{2}$  ser weight. These are put into the crucible, and in about 24 minutes become red. The fire is kept up until night, but is then allowed to go out. In the morning the cakes are taken out and powdered. The powder is then put into the crucible, before noon melts, and is taken out and thrown into water. The slag is then powdered and dried. Next day the powder is put again into the crucible, and melts before noon. It is stirred all day, and in the

evening is taken out and poured on the ground to form cakes. If the last melting is continued long, the green colour is pale, and is called white; if continued for a shorter time, it is deeper, and is called green but inclines to blue.

There is another green glass, of a bright grass colour (Zumorrodi) and more diaphanous. The process goes on as in the former case, until the materials have been thrown into water and powdered. To this powder is added  $\frac{1}{16}$  of a black carburet, or, perhaps, merely a peroxide of copper, prepared as follows: take a quantity of copper, and make it into very thin plates; take a piece of moistened cotton cloth, cover it with turmeric made into a paste with water, and then sprinkle the surface with salt (muriate of soda); place on this the copper, cover this with salt, that with a paste of turmeric, and that with cloth; then heat them on the outside of the furnace for four or five days. During this the vegetable matters are reduced to charcoal and have penetrated the copper, which is then powdered and is quite black.

Another glass, of a bright deep blue (Asmani), is made in the same manner, only the matter added is a metallic slag called Rung, which comes from the west of India, and sells at  $2\frac{1}{2}$  Rupee a ser. It probably contains cobalt; but, previous to being put with the other materials, is powdered with a little muriate of soda, and becomes black. The powder, when heated, emits copious fumes, but has neither the smell of arsenic nor sulphur; 3 sers of the powdered glass require 3 chhataks of the Rung, powdered with a little salt.

Another glass, of a brownish purple (Uda) colour, and somewhat diaphanous, is made by adding a stone called Sengr, which comes from the Ramger hills, and sells at  $1\frac{1}{2}$  ana a ser. The stone is powdered, and about  $\frac{1}{4}$  ser of this powder is mixed with 1 ser of the powdered glass, after it has been thrown into the water.

The workmen make also two enamels, that are applied to the surface of some of the rings.

One is yellow, 5 chhataks of lead are melted in an oblong earthen shallow crucible. To this is added 1 chhetak of tin, and the alloy is calcined for between four and five hours. When calcined, and heated to redness,

it is taken out, powdered, put into the crucible of the glass furnace, and heated to redness. Then is added a chhatak of powdered white quartz, and the mass is stirred about for three hours. It is then taken out with a ladle, poured on a smooth stone or iron, and cooled in water. The workmen, having melted one ser of the palest green glass, added  $\frac{1}{4}$  ser of the above materials, which makes the yellow enamel.

The green enamel is made in the same manner, only to the melted glass are added, not only the prepared lead and tin, but  $\frac{3}{4}$  chhatak weight of the black powder of copper prepared as before mentioned. These glass rings are often coated with lac coloured gaudily, or ornamented with tin and copper foil.

35. The workers in shell are confined to the eastern part of the district, and are neither rich nor dexterous

36. The Malis who prepare garlands and work in the pith of the *Oeschynomene diffusa* (*Sola*) are far inferior in skill to those of the N. E. parts of Bengal

37. The Malis of this district do not make ink; that art in some parts forms a separate profession. The artists collect the lamp-black, of which the ink is made, by inverting an earthen vessel over a burning lamp. Their ink is never formed into bars, like that of the Chinese, but I believe it consists of entirely the same materials.

38. The mat-makers of Gogri, who form by far the greater part of those in the district, make chiefly mats of the common reed (*Arundo Donax*) or Narkat, which they split open and interweave as mentioned in my account of Puraniya. In this district no mats of bamboo are made after this manner; but the basket makers weave neat mats for covering floors, of thin slips of bamboo. Such persons, however, are not mat-makers by profession, and live chiefly by other work made of the bamboo. The matmakers of Gogri make also mats of the sacred grass called Kus by the natives (*Poa cynosuroides*). Part of the mat-makers in the other divisions make mats of the above mentioned reed and grass, but others make mats of the leaves of the Khajur or wild date. These mats are very much used for bedding, but are mostly made by those who use them. I have entered in the list only the few that make them for sale,

39. Those who make a profession of thatching huts and constructing walls of reeds and straw live at the three chief towns, and are on the same footing as in Puraniya.

40. All the basket-makers are here reckoned of one kind, Dom Bangsphor. As I have above said, they make mats of the slips of bamboo neatly interwoven, but this is only done on commission, and their chief employment for the ordinary supply of the market is making baskets (Dalis), winnowing fans (Sup) and fans for cooling the air (Pangkha). When ordered they also make umbrellas, screens for doors (Chik), and large circular baskets that serve as granaries (Dol). They all keep swine, which gives them a great supply of food, but their excessive dissipation prevents them from having anything to spare for clothing, and their huts are inconceivably wretched.

41. The paper-makers make paper, much of the same quality with that of Ronggopur, and use the same materials.

42. At the capital is one book-binder like those in Dinajpur.

43. The tanners as usual, are of two kinds. Those who make shoes, ropes, drum-heads and saddles, and cover baskets, in the western parts are called Chamar, and in the eastern Muchi. Some at Mungger make very neat shoes, after the European fashion; and partly there, partly at Bhagalpur, are about a dozen houses, the people of which make neater shoes of the native fashion than are made in any of the districts hitherto surveyed. Those in the villages, forming the great mass, live chiefly by making shoes and ropes for the farmers, and form a regular part of the village establishment. They are paid chiefly in grain, and each family may make 3 R. a month. The good workmen in towns make 5 or 6 R. a month.

44. The other tanners make leathern bags for holding extract of sugar-cane, molasses, boiled butter and oil. They are here called Dabgar, and are confined to Mungger, where a family may make 4 or 5 rupees a month.

45. Those who make fire-works ( Atushbaz ) are nearly on the same footing as in Dinajpur. Rockets are much used at marriages and at some Muhammedan festivals.

46. The number of those who live entirely by preparing tobacco for the pipe is not so great as in many other districts, for many confectioners ( Halwai ) and retailers of provisions ( Modi ) practise this art as in Puraniya. Some of the tobacconists sell also betle.

47. The same people usually prepare the charcoal balls used in smoking, and it is only at Munger and Rajmahal that the making these constitutes a separate art; and even there some of the tobacconists deal in this article.

48. At Munger is a man who prepares an intoxicating sweetmeat from hemp leaves. I did not learn the process.

49. The distillers are, in proportion to the population, more wealthy and numerous than in any the districts hitherto surveyed; and they distil entirely from the Mahuya flowers ( Bassia ). The dry flowers, with from equal to double quantities of water, are put in round earthen pots with rather narrow mouths, and exposed to the weather to ferment. This process is finished in from four to eight days, according to the heat of the weather. The whole fermented mass, flowers and water, is put into a still, and the spirit is drawn slowly off. It is never rectified, and after distillation is always very much diluted with water, owing to which it will not keep above 15 days, and it is best when fresh from the still.

If rectified, or even if kept undiluted, it would preserve longer, but the customers would not have enough for their money. The dilution is usually a quantity of water equal to that of the spirit. The water is sometimes put into the recipient before the distillation commences, and at others is added when the operation has finished. The still is a large earthen pot, placed, inclining a little to one side, over a fire place, confined by two walls of clay. The head of the still is a small earthen pot inverted on the mouth of the larger, and luted with clay. There

tubes, more or less, of hollow bamboo pass from the head to an equal number of narrow mouthed unglazed earthen pots, that serve as recipients, and are placed in a shallow cistern containing water. A boy attends and pours water alternately over the pots.

The estimates of profit and loss, which I received, vary a good deal, as might be naturally expected. At Bangka, a man, who pays 8 anas duties a day, gave me the following account.

20 sers (80 s. w. a ser) of dried flowers are used daily. They are put into four pots, each containing 13 sers of water. When fermented, they are distilled, one pot being drawn off at a time; of course the still is drawn off four times a day. At each time 5 sers of liquor is procured, that is 20 sers a day. To this he adds 30 sers of water, which gives 60 bottles of liquor. He sells the bottels for ½ paysas, so that the 60 bottles bring 1 R. 13 a.

His monthly gain is should tabulated therefore  
54 R. 6 a.

His expense is as follows: to 15 mans of flowers, 12 R.; firewood, 2 R. 13 a.; a servant's wages, 2 R.; pots, 15 a.; duty, 15 R.; (total 32 R. 12 a. Profit, 21 R. 10 a.

At Jamdaha, a distillery, which paid at the same rate of duty, uses a larger still; as at each time it contains 10 sers of flowers; but then the owner distils only twice a day, and seems to draw off the spirit more slowly, and by this means brings over also more of the water, so that from the 20 sers of flowers, distilled, are obtained 32 sers of spirit, to which is added, an equal quantity of water, that renders it a very poor stuff. Although the owner thus procures 64 sers of liquor, he can only sell 56 sers, as every man who drinks, must be allowed more than the measure, for which he pays. The flowers, when I was at Jamdaha, having risen to 1 Rupee for 40 sers, he had raised the price to  $2\frac{1}{2}$  paysas a ser. His daily sales, therefore, were equal to 140 paysas, of which 68 were then equal to a rupee, so that his sales amounted to rather more than 2 R. a day.

His expenses were—

		Rs. as. g.
Flowers	..	0 8 0
Wood	..	0 0 5
Servant	..	0 1 0
Pots etc.	..	0 0 15
Duty	..	0 8 0
	<b>TOTAL</b>	<b>1 2 0</b>
Profits	..	0 14 0 a day.

At Mungger, a man who pays 5 Rupees a day as duty, says that he daily draws off 14 stills, each containing 15 sers of flowers. If the best liquor is required, he only draws off 4 sers from each still; but what is in most common demand, is made as follows: 16 sers of cold water are put into the recipients, and the distillation is continued until the liquor procured amounts to 28 sers; but these can only be sold for 24. The price, being  $\frac{1}{2}$  ana a ser, amounts to 12 anas for each still, or in all to  $10\frac{1}{2}$  rupees a day. The usual price of the flowers being 40 sers for the rupee, the expense will be as follows:—

		Rs. as. g.
Flowers	..	5 4 0
Servants	..	0 5 0
Pots	..	0 1 0
Fuel	..	0 7 0
Duty	..	5 0 0
	<b>TOTAL</b>	<b>11 1 0</b>
So that he loses daily	..	0 9 0

But this is quite absurd, more especially, as I am informed by one of them, that, besides the duties paid to government, it is customary to give a sum to the native officer, who superintends this branch of revenue; and that last year, on this account, no less than 1500 R. were given in Mungger. The other accounts are probable enough, as the profits mentioned would allow considerable deductions.

50. In Kalikapur one family prepares a fermented liquor from grain which is not distilled. This is called Pachoi and the manner of preparing it has been given in

my account of the hill tribes, from whom the custom has been borrowed. He pays 2 anas as a day duty.

51. In my account of the natural productions, when treating of the Tal and Khajur palms, I have mentioned all that need be said about those who extract palm wine (Pasis). In the rainy season they make mats of the palm leaves.

52. The oilmakers are fully as poor as those of Puraniya. It is only at Munger and Rajmahal, that a few have two mills, and many mills are provided with only one beast. About  $\frac{1}{6}$  purchase the seed, and sell the oil,  $\frac{1}{6}$  grind for hire. Except the mill and beast, with perhaps one or two rupees' worth of seed and oil, they have no capital. Some even have not a beast, but turn the mill with their own hands.

53. The Dahiyars, who make curds and boiled butter, are numerous, and have more capital than those of Puraniya. Those of Munger make advances for milk, and one house is thought to be worth 25,000 R. Some have a few cattle, but not large herds; those who keep such seldom make curds or butter, which is a very great want of proper economy. The customs here are exactly the same as in Puraniya, only that the rich men of Munger make advances from their own stock.

Milk is prepared in the same manners as in Puraniya, only dry curd (Chhana) is scarcely known, and insipid milk (Mawa) is very seldom used. Buffalo milk in some places is dearer; in others, it is cheaper than that of cows.

54. At Munger 3 milkmen (Makkhanwalehs) prepare butter after the European fashion, for the use of the Europeans in garrison.

55. There is only one man who makes sweetmeats after the fashion of Bengal (Mayra) and resides in the capital. Even in the Bengalese part of the district the Hindustani fashion prevails.

56. The Muraris make another kind of sweetmeats and parch various grains.

57. The Halwais, who prepare sweetmeats after the fashion of Hindustan, are numerous and execrable performers. They make also a small quantity of the sugar called Chini, which has been formerly described; and

also some of a coarser kind called Shukkur, which is that most commonly used in this district ; but I had no opportunity of learning the process.

58. The Puya and Phulauri, mentioned in the account of Dinajpur, at Bhagalpur gives employment to 100 families. In other parts of the district these articles of food are prepared by the Halwais, mentioned above, or by the Bharbhunas, or women of poor families, who parch grain for hire or sale.

59. These Bharbhunas, called also Chabena-furosh Bhunaru and Bhujarus, live chiefly by parching pulse and maize. The preparations of rice, called Chura and Okhra are little if at all known, and the same is the case with the cakes called Bhaka.

60, 61. In this district those who make flour for sale (Maydapesa) are considered as of a different profession from those who split pease (Daihari). Both are confined to large towns, and some of them make good wages, both men and women working, and some of those who deal in flour are rich, and hire labourers. In small places the retailers of provisions (Modi) carry on both these trades.

62. At the 3 chief towns are bakers ( Nanwai ), who make bread after both the European and Hindustani fashions. They also sell ready dressed meat as in Puraniya.

63, 64. As in Puraniya there are butchers of 2 kinds, the Bukurkussab killing sheep and goats, and the Kussab killing beef.

65. The Bawarchis or cooks are on the same footing as in Puraniya, and at entertainments are hired to dress food by the hundredweight.

#### SECTION 2D.

##### *Of those whose work in more durable materials.*

66. In this district blacksmiths and carpenters are so intermixed, that it is with difficulty that they can be separated ; for those who make the implements of husbandry in some places are called Barhai, and in others Lohar. In some places the same persons make the whole implements of agriculture, wood and iron, and coarse work of both kinds ; while in others the two

professions are separate, although in general the people are considered as belonging to the same caste. These country tradesmen form a regular part of the manorial establishment, and are usually paid in grain for the implements of agriculture.

67 At Munger and Bhagalpur, are some workmen who make household furniture, vastly superior to what is made in the districts hitherto surveyed; and these persons make a great deal after the European fashion, which they sell to passengers, and sometimes send to Calcutta. The articles chiefly made are chairs, stools, couches, and bedsteads: but they also make some tables, although the pieces of timber that are procurable are not of a sufficient size, and in order to form a leaf, must be joined. The furniture is abundantly neat and cheap but in general is so patched, and contains so many pieces with flaws, which are carefully filled with coloured wax, that it very soon becomes rickety. On this account the workmen are very desirous of selling it to mere passengers, with whom they are not likely to meet after the defects have been discovered.

The same people, if desired, will make palanquins and carriages, and when looked after, and furnished with sound materials, are clever workmen. There are at Bhagalpur about thirty workshops, and at Munger about forty. In each shop are from two to ten workmen. The master sometimes hires the workmen, and furnishes materials and implements. At other times, all the workmen are partners. Journeymen's wages are from 1½ to 2 anas a day. The carpenters of Munger are the best, and chairs, stools, couches, and bedsteads may at all times be had ready made. At Bhagulpur, well-finished work is seldom procurable, without being commissioned. Two or three shops in Gogri make the same kind of goods, and send them to Munger for sale. Three houses in Bhagulpur, and five at Munger, have some stock, from 1 to 3000 rupees each.

68. The other carpenters make coarse furniture for country use, such as that described in the districts hitherto surveyed.

The number of boats built is very inconsiderable. I did not see one in the stocks, but heard of perhaps 14

or 15, mostly small. The building carts is also a considerable employment to the carpenters. The common carts of this district are made with axles and wheels, after the European fashion, and seem to go fully as well as those of Puraniya, but are not considered by the natives as so fashionable for travelling. Some of the Puraniya kind are therefore made or imported.

69. The reason probably why the carpenters of Bhagalpur finish their work less neatly than those of Mungger is that formerly all their work was painted, and often, above the paint, was ornamented with flowers in imitation of gold and silver. This kind of painting was called Jappani. The colours were laid on with glue from Patna. This kind of furniture being no longer fashionable at Calcutta, the workmen have become poor, and are chiefly employed to paint stools for natives, small turned boxes, staffs, and the shafts of spears, but they are also occasionally employed to paint houses, boats and palanquins or other carriages, with common oil-colours. Most of them are Moslems, and must be considered as having been very unfortunate. They are called Kamangur, and during the Mogul Government, were those employed to make both cannon and small arms. In a short time therefore, they have been compelled to change their profession, and the new one, which they had adopted, has become unfashionable.

70. At Mungger are three families of men who were not Kamangur, but who always have painted houses, boats, palanquins or carriages. Such workmen are called Nukas. Those of this district, owing to the want of a proper oil, are bad performers.

71. At Mungger, are seven houses of Goyalas, or cow-herds, who, by a very curious process, make a yellow paint. Each house has from five to fifteen head of cattle, male or female. During the six months following the middle of November, these cattle are allowed to pasture only half the day, are then tied up, and supplied with mango leaves to eat, which the people say does them no harm. In the morning the men watch, and collect what urine the cattle void; and procure 4 or 5 sers (each 2 lb. 2½ oz.) It is boiled until it becomes thick, cooled, and strained through a cloth: what remains

on the strainer, is the paint, which is called Piyuri, and is made into little balls. Some say, that the urine gives  $\frac{1}{16}$  of its weight of the paint; others admit only of  $\frac{3}{80}$ , or even of  $\frac{1}{40}$ . Merchants make advances at the rate of 1 R. for from 1 to  $1\frac{1}{4}$  ser. Each house makes from 3 to 4 mans a year, which, were dear, is to the value of from 120 to 160 R.; and, when cheap, from 96 to 128 R.

72. Sawyers, who do no other kind of work, are in this district not at all common. Most of the carpenters saw their own timber.

73. At Mungger and Bhagulpur are a good many turners, who make the same articles that have been described in the accounts of former districts. They are all Muhammedans. In many parts of the district the carpenters also turn.

74. At Mungger and one or two other places are a few men who make hair combs of Karam wood (see trees No. 50). Their work is very clumsy and the teeth very wide. The wealthy destroy vermin by frequent and copious applications of oil: the poor louse each other with their fingers, but do not eat the vermin like the Chinese.

75. The potters in general of this district are nearly in about the same state with those of Puraniya, but both at Rajmahal and Mungger, they make some wares of a fine quality, especially a kind of bottles for holding water (Sorahi), which, being porous, render it cool. Those of Rajmahal are uncommonly light and very porous, so that they look neat, and produce a very considerable coolness. I did not see any of them until I had left the place, and the potters there, when asked, denied their making anything but the common coarse ware. I can therefore give no account either of the materials or manufacture. At Mungger they make two kinds of these bottles; both are black, which seems to be chosen by the natives as hiding dirt.

The one kind is small, and exceedingly light; but it is smoothed on the outside, and does not allow the water evaporate freely, so that it produces little coolness. The other is coarser and heavier; but allows more free evaporation. These bottles exactly resemble in shape the black guglets (Kuzah) of Calcutta, well known to almost

every one who has visited India, as being sent from Calcutta to all parts frequented by Europeans.

A potter of Mungger, who makes these bottles, and also implements for smoking tobacco, says, that he does not make common pots. He makes his ware of a smooth black clay, which he finds near Chandi-than. It contains no sand nor pebbles. He forms the ware on the wheel, as usual. The larger kind of bottles, when formed, have applied to their surface some of the fine river sand, which contains much mica. The smaller kind has a substance called Gabi applied. This Gabi is a red clay, found near Sitakunda, which is mixed with water, and forms a pigment, which is applied by means of a cloth. It is smoothed by rubbing it with oil. After drying for some days, the vessels are put in a small kiln, with alternate layers of fire-wood, and covered like a charcoal-maker's kiln, with earth. When the workmen think that the vessels are sufficiently baked, the rents in the covering are repaired, and some oil-cake is put into the kiln, which occasions a prodigious smoke, and stains the vessels black, nor does the smoke affect the water which is kept in these vessels. He says, that the people of Rajmahal make the smaller kind only; but make them red, white and black. The red are merely made of the clay, without any coating, or without being smoked. The white, before being burned, are washed with a pigment of Khari, or porcelain clay. The black are made in the same manner as here, and do not cool the water so well as either the white or red. The art has been lately introduced at Mungger.

76. Those who mould images in clay are chiefly employed to make toys for children. Very few images of the Gods are made of this material, nor are offerings made of the images of horses to the shrines of saints.

77. The brickmakers are fully as bad as those of Puraniya, and I observed one set of Nepalese workmen employed.

78. The bricklayers of the present day, so far as I saw, are execrable, and are especially defective in preparing their plaster, which often, even when new, does not turn the rain.

79. The Baruyi, who sell betle prepare in general the lime that is used with that substance. In Behar, stone time, or a kind of potash, prepared from the bark of the Asan tree, are most commonly used; and it is almost alone in the parts south from Rajmahal, that shells are collected for the purpose. The seven houses of lime-makers in that part of the country, collect and burn these shells. The others are employed to burn stone-lime, of which I have given an account among the natural productions. At present, the calcareous nodules called Ghanggat, are almost alone selected, and the two chief places where these are burned, are Bhagalpur and Sakarigali. At the latter place, on an abrupt bank of the river, just above high water mark, there is a horizontal bed of clay, among which the calcareous nodules are thickly impacted. In the floods, the workmen occasionally dig into this; but with fear, as the bank has occasionally fallen, and proved fatal. They therefore do not work at that season, unless when the demand is very urgent. When the floods subside, a great abundance of the nodules is always found lying among the sand, under the bank. These might no doubt be then collected to serve the burners throughout the year; but such an expence of capital as would be required for the time of the collectors, is very seldom incurred by the artists of India. At Sakarigali it is said, that there are only five houses of lime burners; but these are in fact merchants who perform no part of the work, and hire the neighbouring peasantry, and people of the hill tribes, so that from 2 to 300 people, men, women, and children, are often employed. They have seven battas, or kilns, sunk into the ground, and their sides secured with wellkneaded clay. They are circular, about 10 feet deep, 8 in diameter at the bottom, and 12 at the top. At equal distances round are 4 holes, which descend on the outer side of the clay to the bottom, and there pass through this wall, into the cavity of the kiln, and give an abundant supply of air: but, although the kilns have been built on a sloping ground, it has not entered into the imagination of the natives to make a passage, through which the burned lime might be drawn from the bottom of the kiln. Of course a great deal of very disagreeable labour and time is employed in taking it up in baskets.

Billets of wood and calcareous nodules are thrown intermixed into the kiln, and, when it is filled, the wood is set on fire, and allowed to burn without covering up; nor are the natives in this operation at all aware of the advantages of a smothered heat, which have been so well illustrated by Buffon, in his valuable treatise on heat. The expense of fuel is therefore great, although the kilns are surrounded by woods that are free for the workmen and the operation is imperfect. The following is a statement of the expense attending the burning of each kiln:—

	Rs. a. p.
To digging the sand to render the nodules accessible, 40 days' labour	2 8 0
To 250 days' labour of men, women, and children, at from $1\frac{1}{2}$ to 4 pan of cowries, according to age and sex, employed to collect the nodules	9 0 0
Fire-wood furnished by contract with the hill people	20 0 0
25 days' labour to remove and slake the lime	1 9 0
50 days' labour to separate the ill-burned pieces from the powder	3 2 0
 Total ..	 36 3 0

Each kiln gives from 4 to 500 mans (92 s. w. a ser), each weighing almost  $94\frac{1}{2}$  lbs., for which the merchant or burner is paid at the rate of 12 rupees for the 100 mans. The average value of the lime of each kiln is 54 R. leaving a profit of 17 R. 13 a., or in the medium of years about 80 R. a year for each kiln. Out of this the merchants have to pay 10 R. for rent. None is ever made without the whole price having been previously advanced, and the burners very seldom fully complete their engagements, or are able to refund the balance. At Bhagalpur, are 15 houses of lime burners, but on a much smaller scale, as they are the actual labourers, and do not hire in assistants.

80. Stone cutters are here more numerous than in the districts formerly surveyed; because there are

several quarries. In the account of the natural productions, I have mentioned these quarries, and have given some account of the imperfect manner in which they are wrought. The workmen very seldom give themselves the trouble to split the entire rock. As much as possible they endeavour to find among detached masses those of a size that will suit their purpose; and, where these cannot be had, they take advantage of natural fissures in the more decayed parts of the rock, and remove masses by means of iron crows. Their operations are now entirely confined to hornblende, or indurated potstone, and to milstones: but traces remain to show, that granite has been formerly wrought, and the blocks have been separated by wedges, exactly as I have described in my account of Mysore. The present workmen could cut granite square with the chisel; but they are totally unable to give it a marble polish; nor could I procure one, that could do this even to calcareous marble. They only attempt to polish the hornblende, and this does not take a finer surface than that of a writing slate. The workmen of Bhagalpur have for some years been chiefly employed in the Jain temple of Champanagar. Those of Ratnagunj make only stones for hand-mills. Those of Mallepur chiefly quarry milstones and hornstone, and form these materials into rude blocks, which are afterwards finished at Munfiger. Plates, cups, mortars, and weights are made, for common sale, of the hornblende, or hornblende slate, and images of Siva, when commissioned, are made of the former. The workmanship of these images is fortunately so rude, that they convey very little idea of the indecencies which they are intended to represent. The cups and plates are heavy, and are not turned in the lathe; but they are cut with an exactness, that is surprising, and which I should have thought impracticable except by turning: and I have no doubt, that these workmen are capable of executing with great neatness any design that could be given to them.

The white aggregate rock of Laheta is made into the stones of hand-mills, and those for rubbing sandal and curry stuff.

Two of the houses at Mungger are rich, having a stock of about 1000 rupees. In general the stone cutters

make good wages; and, when they have no employment in making new goods, they are sure of finding work by going round to pick the old mill-stones that have become too smooth.

81. The small number of goldsmiths that is to be found in most parts of the district, will show the small extent that has been made in the luxury, to which the women of India are most addicted, that is, the having many ornaments of gold and silver. In Mungger, however, the number of workmen is great, and the brides, from far and near, go there to be equipped. Some of them are exceeding neat workmen, and make plate almost as neatly as could be done in Calcutta. These make very high wages, 8 anas a day; but many in the district do not get above  $\frac{1}{8}$  of that sum. None of them have any capital, nor make goods for sale; as no native would trust bullion in their hands, nor to their making it up without adulteration.

82. Very few vessel of copper, brass, or bell metal are made in this district and the workmen are chiefly employed to mend those imported from Murshedabad, and to make female ornaments. In some places these two professions are considered as distinct, the makers or menders of vessels being called Kasera, and the makers of ornaments being called Thathera; but in others the terms are used as synonymous. All here are poor.

83. At the capital there is one man who works in the alloy called Bidri, of which I have formerly given an account.

84. The Rangdhaluyas or Ranggarhuyas work in tin and pewter (Ju-tah), making ornaments for women, and tin leaf. A man takes one ser of tin worth 1 R. :  $\frac{1}{2}$  ser of lead worth 4 anas;  $\frac{3}{4}$  anas worth of oil, which is put on the metals while in fusion, to prevent calcination;  $2\frac{1}{2}$  gandas worth of borax, used in soldering; and requires 4 anas worth of charcoal: the whole cost is therefore 1 R. 5 anas,  $7\frac{1}{2}$  G. He procures  $1\frac{7}{16}$  ser of pewter; for which the natives here have no appropriate name. In five days a man makes this quantity into rings, bracelets and other ornaments, and his wife sells the work for 2R.

85. The Kalaigars tin brass or copper vessels,

86. Those who make flexible tubes for smoking tobacco are considered as very ordinary workmen.

I have already had occasion to notice, that in some parts of the district the professions of blacksmith and carpenter are united in the same persons. In other parts again they are separated, and I have mentioned that those of both classes who are employed in making the implements of agriculture are usually paid for their labour in grain, and are often entitled to a certain share of the crop, forming a regular part of the establishment on each estate. From among those who labour at the anvil alone, I must notice two classes who do not belong the manorial establishment; one of them in the forests forges the crude iron, as it comes from the smelters; the other in towns, make the finer kinds of goods. Before proceeding to mention these, however, I must give an account of those who smelt the iron, who in general, however, work part of the year in cultivating the ground.

✓87. In my account of the natural productions, I have mentioned the very imperfect skill which the people of this district have in working their mines of iron; and the defects in the manipulation necessary to fit the ore for the furnace. The heat of the furnace is so trifling, that it cannot vitrify the stony particles of the ore, which consequently must be reduced to a coarse powder to separate these particles by winnowing. Having no means of performing this operation, except by beating the ore with a stick, wherever it is found in solid masses, it is considered as useless. The same people mine, prepare charcoal, and smelt, so that no estimate can be formed of the expense of the different parts of the process; and, being very ignorant timid creatures, very little reliance can be placed on the accuracy of such information as they gave; nor can we form any judgment concerning the nature or richness of the ore from their operations, as they never have weighed nor measured either the ore that goes to the furnace or the masses of crude iron that come from it.

The furnace consists entirely of kneaded clay, and is about  $3\frac{1}{2}$  feet high. The upper extremity (see drawing No. 26 a) is round, and about 18 inches in diameter.

It is slightly concave, and in its centre is a hole (*b*) about 2 inches wide, which descends gradually, widening to the ground (*c*), where it may be from 9 inches to a foot in diameter. Under the top the furnace contracts a little, and then it swells out like a bottle ; but very little only towards the back and sides, and a good deal towards the front, in the bottom of which there is a semicircular opening (*d*) which communicates with the inner cavity of the furnace (*b,c*). In this opening is laid a pipe of baked clay (*e*), which receives the muzzles of the bellows ; and, when going to work, the opening round the pipe is covered with kneaded clay. Some charcoal is put in the furnace, and having been kindled, the bellows are applied. The cavity on the top of the furnace is then covered with charcoal, and as this kindles, some of the prepared ore is thrown on it, and thrust into the hole, as the fuel below is consumed. This is repeated until the whole ore intended for the smelting has fallen through the aperture ; and the fire is kept up until the workmen judge that the operation is complete. The clay and pipe are then removed from the front of the furnace, the mass of iron is taken out, while yet hot is cut in two, and is then cooled in mud, a good deal of which penetrates its pores, and adds to the weight. In this state it is always sold. Some of the smelters allege that in each furnace they always add a quantity of iron dross that is, procured in forging the crude iron ; while others allege that they use ore alone ; and I have heard it asserted that the best iron is made entirely by smelting this dross, without any addition of new ore ; while finally some of the forgers assured me that the dross was totally useless. I cannot take upon myself to reconcile such discordances; but I saw some iron smelted, in which the dross was added, some in which the ore alone was used ; and near some of the forging furnaces I saw lying a quantity of the dross, which no one, I was told, thought it worth his while to remove. The bellows are the most ingenious part of the apparatus. Each consists of a cylinder of wood, about 18 inches in diameter, and 6 inches high. This is hollowed, so as to leave thin edges, and a thin bottom. The top is covered with a hide, tied firmly round the mouth of the wooden vessel ; but the skin is

not tight like a drum; on the contrary it may be drawn up or pushed down to a considerable extent. In its centre is a hole about an inch in diameter, through which is passed a wooden button, that holds a string tied to the end of a bamboo, fixed like the spring of a turner's lathe. When at rest, the spring raises the skin, so that its upper surface is a hemisphere. The muzzle of the bellows is a bamboo, about 4 feet long, which passes through a hole in the side of the wooden cylinder. Two of these bellows are placed close to each other. The workman, who is to blow with them, puts his heel first on the hole in one skin, and depresses it, expelling the wind by the muzzle; he then puts his other heel on the other hole, and thus, treading alternately on the two cylinders, expels the wind, while the spring raises the hide, when he lifts one of his feet to throw the whole of his weight on the other. When it is wanted to increase the power, another workman stands behind, and both tread at the same time. This gives as much wind as the bellows of one of our blacksmith's forges, but with a very severe labour. During this operation the mass of metal would not appear to be ever melted, it is only so far softened, that the particles cohere in a slaggy porous mass.

In Bangka, where 150 of the smelters reside, it was alleged by themselves, that they only smelted five months in the year, and that they wrought in their farms, and in collecting Mahuya flowers for the remainder, except during the two months of marriage feasts, when very little work is done in that part of the country. Other people however said, that on an average they wrought 20 days a month, throughout the year, and on an average a family, of one man, his wife, and a boy or girl able to assist in collecting ore, can smelt twice a day, procuring daily about 5 sers of 36 paysas or 72 s. w. ( $9\frac{1}{4}$  lbs. or more exactly  $9\frac{24}{100}$ ) of iron, which they exchange usually for  $7\frac{1}{2}$  sers, (80 s. w. or  $15\frac{4}{10}$  lbs.) of rice, but when I visited the place, they procured only 5 sers of that grain. As they are most notorious drunkards, although in other respects they live very poorly, we cannot allow that they make less. Each family therefore makes in the year about 30 mans of crude iron, or in all 4500 mans

(about 2970 cwt.), and 2000 mans (about 1170 cwt.) of forged iron (64 s. w. a ser) are said to be exported, which confirms the above calculation. Twenty-five traders advance grain to these smelters (Kol), and sell this crude iron, called Bhinda, to the forgers at from 1 to  $1\frac{1}{2}$  R. a man (the ser 64 s. w.) equal to nearly  $651\frac{7}{10}$  lbs. The accounts in Tarapur did not differ very materially, and there being in that district 100 families, they will make annually about 3000 mans of crude iron. In Lakardewani the smelters only allowed 12 mans of iron for each family ; but little reliance can be placed on what they said; nor can it be conceived that they make less than their neighbours ; so that, there being 70 houses, the crude iron annually made will be 2100 mans. In the whole district we must therefore allow the annual produce of crude iron to be 9600 mans or 6336 cwt. A family can make about  $2\frac{3}{4}$  R. a month, and cultivate 4 or 5 bigahs of high land. Each pays from 1 to  $1\frac{1}{4}$  K. as rent for ore and charcoal, and about 12 anas for the fields, which are generally cultivated for a few years, and then fallowed, as the smelters often move in search of ore.

88. The iron of Kharakpur is reckoned the best that comes to Mungger ; and greatly superior to that of Virbhumi, or Ramgar. It is forged into various forms. That intended for plough shares (Phal) is the highest priced, selling at Mungger for about 6 sers (84 s. w.) almost 13 lbs. for the rupee. It comes nearly fitted for putting in the plough. That intended to be wrought again is in larger masses, capable each of making a hoe, hatchet, or some other instrument, from whence it derives various names, and sells at about 8 sers or  $17\frac{1}{4}$  lbs. for the rupee. In working into coarse goods it loses one-third, and wrought into fine goods it loses one-half.

Some blacksmiths do nothing else but forge the crude iron, while others employ part of their time in making the implements of agriculture, and coarse utensils used in the country. They all resides near the mines, and the crude iron is never sent to a distance for market. Five or six men are employed at each forge (Maruya), which does not differ much from a common Indian blacksmith's ; nor is it requisite to strike the iron with a larger hammer than that which an European blacksmith's

assistant commonly wields, weighing perhaps four or five pounds. The crude iron is heated and hammered three or four times, and is then fit for sale, being formed into little wedges, bars, or plates, according to the various purposes for which it is intended. Each man, it was said, could make two anas a day; but they would give me no estimate of the quantity of forged iron procured from a given quantity of crude iron, on which I could place reliance. In some places they stated, that the forged iron was  $\frac{3}{5}$  of the crude, in others  $\frac{1}{4}$ , and there is no doubt that the loss is very great, as I evidently saw during the operation, but the abovementioned loss is certainly exaggerated. The statement, on which I can most depend, was procured at Bangka. A forge, with six men, makes daily 10 sers (64 s. w. =  $1\frac{64}{10000}$  lb.) of each of three kinds of iron; one fitted for plough-shares, one for hoes, and one for hatchets. Ninety sers of crude iron worth 3 R. give 40 sers of the forged worth, at the advance price,  $4\frac{1}{2}$  R; and to forge this quantity requires  $7\frac{1}{2}$  anas worth of charcoal. Each man therefore makes 2 A.  $1\frac{1}{4}$  G. a day. The  $1\frac{1}{4}$  ganda may be allowed for the expense of implements, etc. They never work but when they receive advances. Merchants usually sell them the crude iron, and purchase the forged, so soon as made. \*

89. The blacksmiths who are employed in making finer goods, in general work for the use of the natives, making spears, swords, matchlocks, and a rude kind of cutlery. Some of them however at Bhagalpur and Tarapur are good workmen, and capable of making anything, for which there is a demand. At Mungger are about 40 houses of blacksmiths, who chiefly make goods after the European fashion, very coarse \* indeed when compared with English work, but cheap and useful. The following is a list of the articles made, with the most common rates of their value.

#### VALUE OF IRON MANUFACTURES.

			Rs.	As.	P.
Double-barrel guns	..	..	..	32	○ ○
Rifles	..	..	..	30	○ ○
Single-barrel fowling pieces	..	..	..	18	○ ○
Muskets (Atmanari)	..	..	..	8	○ ○
Krabin (blunderbuss)	..	..	..	25	○ ○
Ordinary matchlock pieces	..	..	..	4	○ ○

			Rs.	As.	P.
Carved matchlock pieces	..	..	6	0	0
Pistols single-barrel	..	..	10	0	0
Pistols double-barrel	..	..	20	0	0
Tea-kettles (Mug)	..	..	0	12	0
Tea-kettles (Sada)	..	..	0	8	0
*Fish-kettles 30 in. long, and 18 in. wide and deep,	45	..			
*Iron ovens	..	..	16	0	0
Sauce pans	..	..	from $\frac{1}{2}$ to	3	0 0
Frying-pans	..	..	from 1 to	3	0 0
Snuffers	..	..	from $\frac{1}{2}$ to	3	0 0
*Iron cullenders	..	..	..	2	0 0
Chafing irons, square (Chauka Anggethi)	..	..	6	0	0
Chafing irons round (Gol Anggethi)	..	..	2	0	0
Chafing irons high Ukhariwala Anggethi)	..	..	6	6	0
*Chamber stoves (Dhungyakush), or grates	..	..	125	0	0
Kitchen stoves (Drajwala Anggethi)	..	..	15	0	0
Ladles	..	..	from $\frac{1}{2}$ to	0	2 6
Ramrods	..	..	from $\frac{1}{2}$ to	1	0 0
Swords	..	..	from 1 to	3	0 0
Spears	..	..	from $\frac{3}{4}$ to	2	8 0
Table knives and forks, a doz.	..	..	..	6	0 0
Breakfast knives and forks, a doz.	..	..	..	4	0 0
Scissors	..	..	..	0	4 0
Sarota or betel-nut cutters	..	..	2 to	0	6 0
Hindustani bits for bridles	..	..	..	0	4 0
Hindustani stirrup-irons	..	..	..	0	6 0
Horse shoes and hob nails, per ser	..	..	..	0	6 8
Hindustani spurs, per pair	..	..	..	0	12 0
Small hatchet (Tanggari)	..	..	..	1	0 0
Hatchets (Kulhari)	..	..	$\frac{3}{4}$ to	1	0 0
Hoes	..	..	..	0	12 0
*Padlocks, chest locks and doorlocks	..	..	$\frac{1}{4}$ to	1	0 0
*Hinges	..	..	$\frac{1}{8}$ to	5	0 0
Clamps for boat building per ser	..	..	..	0	58 0
Nails for clinker-built boats, per ser	..	..	..	0	58 0
Nails, common, do.	..	..	..	0	58 0
Curry-conbs (Kharara)	..	..	2 to	0	4 0
Sickles, without teeth (Hangsuya),	..	..	$1\frac{1}{2}$ to	0	3 0
Shovels for cutting grass roots for horses..	..	..	2 to	0	4 0
Large sickles for cutting grass..	..	..	..	0	4 0
Sickles with teeth	..	..	..	0	1 0
*Palanquin and cart furniture	..	..	..	..	
Cork-screws	..	..	4 to	0	8 0
Razors	..	..	..	0	4 0
Tongs	..	..	1 to	0	2 0
Rod for cleaning the implement used in smoking	..	..	..	0	6
Coarse needles per 100	..	..	..	0	3 0
Takuya or wheel spindles, per 100	..	..	..	1	8 0

Those marked thus \* are only made when bespoken.

The chief articles are the different kinds of fire-arms, mostly sold to passengers, and carried towards the west ; and tea-kettles and chafing dishes sent to Calcutta. In each shop are two or three men, generally partners or persons of the same family. When any man gets a large commission, he hires in his neighbours. A common labourer gets 2 anas a day, a clever workman is allowed 3. The barrels of the fire-arms are made by twisting a rod round an iron spindle, and then hammering it together. The bore is afterwards polished and enlarged by borers of different sizes. The tea-kettles are made in sundry pieces united by solder, which is a loss, as the solder being copper is dangerous ; and they ought therefore to be tinned when used. The workmen have adopted the European bellows. These improvements were introduced by the Europeans of the regiments formerly in garrison

90. At Mungger is a house of Koftgurs, who plate iron tea kettles, and inlay gun barrels, sword blades or spears with gold or silver.

91. At Bhagalpur are two houses of needle makers, who live entirely by this profession. They have not yet acquired the art of forming the eye after the European manner ; but merely make a hole through the thick end, so that the thread passes with difficulty through the cloth.

92. Cutlers are on the same footing as in the districts hitherto surveyed, but are here divided into two kinds, Sangur who grind razors, knives and other instruments, and Sikulgur, who clean arms with korondum. Many blacksmiths, keep grindstones, so that I heard of only one man who makes a separate profession of that branch of the art.

*SECTION 3D*  
*Of the Cloth Manufacture.*

93. In this district the cotton wool is generally cleaned and beaten by the people called Dhuniyas, who purchase at once a small quantity, clean it and retail it to the spinners, as in Puraniya.

94. All castes are here permitted to spin, and near the Ganges, everywhere except in Rajmahal, it was stated, that a large proportion of the women spin cotton,

some all day but most only for a part; and this is an employment suited well to the jealousy of the men. In Rajmahal, owing probably to dissipation, and in the forests owing to rudeness, the women spin very little. The whole spun is very coarse, and is done by means of the small wheel. The number of women on the whole was estimated at about 160,000. But by taking an average of the various reports of the quantity of cotton required, of the thread spun, and of the value of each, it would appear that every women, one with another, spins annually 16 sers 12½ chhts. of cotton wool (34 lbs. 7½ oz.), worth 6 R. 9½ A., and makes thread to the value of 11 R. 1½ A., having a profit of 4 R. 8½ A. Women who spin constantly of course make more, and many, who are much otherwise employed, make less. This statement, so far as it relates to the quantity and profit belonging to each women, seems pretty accurate; but the total number of women said to spin can by no means be reconciled with the quantity of raw materials said to be used. It was said, the cotton wool imported amounts annually to about the value of R. 2,76,000 which sold by retail, and fitted for spinning, will amount to R. 345,500; and what grows in the country, including that reared on the hills, may be about the value by retail of R. 125,000. These, according to the above calculation, would only employ 71,450 women, who would make thread to the value of about R. 792,600. About 198,000 R. worth of this will be required for mixed cloth, carpets, sewing, &c., the remainder, according to the average of estimates received, would make about 8,32,000 rupees of cloth.

95. The dyers in most parts of the district are chiefly employed to dye the clothes of those who attend marriage parties, that are exceedingly numerous; and during the three months which the ceremonies last, the dyers make very high wages; but at other times they have little employment. They dye chiefly with the safflower, with which they give two colours, Kusami a bright pomegranate red, and Golabi a pale but fine red like the rose; and each colour is of two different shades. They also dye with indigo, but blue is not in much demand; and with the flowers of the Tungd and Singgarhar. As the dyeing cotton with safflower, and the other

flowers is much practised at Mungger, I shall give an account of the processes as they were performed before me.

The safflower, *Carthamus tinctorius* or Kusam, is in most demand.

In order to dye the pomegranate red (Sorukh or Kusami), for three turbans 40 cubits long by 1 wide, take of the flowers 3 sers (84 s. w.) or 6 lb 7½ oz. value 1 R. ; of impure carbonate of soda (Saji), 6 Chhataks, almost 13 oz., value ½ ana ; of turmeric 1 Chhatak, 2½ oz. value ¾ ana ; of any vegetable acid, lime juice, mango, or tamarind, to the value of ¼ anas. Wash the flowers on a cloth strainer with six pots of water, each containing about 15 sers (32 lb. 5½ oz.), until the water comes off clear. This water is called Pili and is used in dyeing green with turmeric and indigo. In about an hour after, wash the same flowers with another six pots of water. This water is called Dohol, and is of no use. Then squeeze the water from the flowers, add the soda and rub them together. Then place them on the strainer, and with 1 or 1¼ pot of water wash out the colour, which is called Sahab, and is the proper dye. In this dip the three turbans, and knead them in the dye. Then take out the cloth, and add the turmeric and acid ; then put in the cloth again, and having soaked it, wring, and dry it in the shade. The same operation is repeated with fresh flowers, on the two following days. If the colour is wanted lighter, a little more water is added to the Sahab ; and if a bad cheap colour is wanted, give the cloth only one or two dips instead of three.

The best Golabi or rose colour is given thus. After having extracted the Sahab colour as above, the dyer adds to the same flowers another pot of water, which extracts a colour called Pachuya, that dyes four turbans of the same size. They are first dipped in the dye, then taken out and an acid added, and then dipped again and dried in the sun. Each turban brings to the dyer 2 anas, and the acid costs ¾. A paler rose colour is given by taking ½ ser of the Sahab colour, adding 5 sers of water, and using this dye as the other. The dyeing three turbans of a bright pomegranate brings the dyer 4 R. 8, and the four turbans of a rose colour brings 8 anas, in all 5 R. The cost is 3 R. 6¾.

Naranggi, or orange colour, and Zurd, or yellow, may be given either with the flowers of the Singgarhar (See trees No. 17) or of the Tungd (trees No. 76), both nearly of the same quality, and used in the same manner; but each turban requires 4 chhataks ( $8\frac{3}{4}$  oz.) of the former, while 6 chhataks (13 oz.), of the latter are necessary. The flowers are boiled in 3 sers (each 2lb  $2\frac{1}{2}$  oz.), of water to 2 sers. When cooled, add  $1\frac{1}{2}$  ser of the Sahab colour, prepared as above from Safflower, and 1 ser of water. In this dip the cloth, wring it, add some vegetable acid, and soak the turban in the mixture for 24 minutes ; then wring and dry in the shade. This makes an orange of different shades according to the quantity of cold water added. Each turban pays for dyeing 4 anas. The yellow colour is given in the same manner, only that no Sahab is added, and that in place of acid 1 chhatak of alum, worth  $\frac{1}{2}$  ana, is employed. The flowers are boiled with 4 sers of water to 3 sers. If a light yellow is wanted, a little cold water is added to the dye when cool.

The dyers of Bhagalpur partly give the same colours ; but about 12 houses are constantly employed in dyeing the mixed cloth made of cotton and Tasar silk, which is woven in the vicinity of that town. These dyers give a colour to pieces that are of an uniform colour (Bathas), and that are dyed after having been woven. I saw 10 colours dyed by the following processes.

1st. Kakreja, a dark brown inclining to purple. Take 25 s. w. Tairi (pods of the *Cæsalpinia*), mentioned in the account of natural productions, bruise and infuse it in the 5 sers of water for 4 gharis. Then strain off the water and soak the cloth in it. Then dissolve  $3\frac{1}{8}$  s. w., of Kusis (a sulphate of iron become white and powdery by exposure to air) in 5 sers of water, and put the cloth in it a few minutes ; wring, and dry it in the sun. Then dissolve  $3\frac{1}{8}$  s. w., of alum in a little hot water, add it to 5 sers of cold, and in this soak the cloth. Then boil  $12\frac{1}{2}$  s. w., of Sappan wood in 15 sers of water for six hours, cool the decoction and soak the cloth in it for one ghari. Then wring, and add to the same colour  $6\frac{1}{4}$  s. w., of lime, stir this about, and put in the cloth again. Then wring and dry in the shade.

2nd. Agari, a brown without any tinge of purple. Take 50 s. w. of bruised Tairi ; infuse in 5 sers of water for about 3 gharis, soak the cloth in the infusion, and wring and dry in the sun. Dissolve 6½ s. w. of Kusis in 5 sers of water, and rub the cloth in the solution for about 1 ghari. Then infuse 18½ s. w. of terra japonica (Kath) in 5 sers of cold water, add a little lime water, and stir the infusion. Then dip into it the cloth, wring, and dry it in the sun.

3rd. Uda, a bright purplish brown. Infuse 25 s. w. of Tairi in 5 sers of water, and soak it in the cloth, wring it, and dry in the sun. Dissolve 6½ s. w. of Kusis, and use it as in the former operations. Then soak the cloth in the solution of alum, such as first used in the first operation. Then soak it for one ghari in a decoction of 50 s. w. of Sappan wood, boiled for 15 gharis in 20 sers of water, which will be reduced to 14 sers. Afterwards to a part of the decoction add a little lime water, put in this the cloth, and dry it in the shade.

4th. The Baygani, a colour rather lighter than the above, approaching to Claret colour. Soak the cloth in the infusion of Tairi, as above. Then put it in a solution of Kusis, and dry it in the shade. Then soak it in a solution of alum, to which some lime has been added. Then boil 12½ s. w. of Sappan wood in 5 sers of water for 6 hours; when cool, soak the cloth in the decoction, and wring; then add a little lime to the same decoction, put the cloth in this, wring and dry in the shade. If the colour is not full, put it again into the decoction of Sappan.

5th. Habasi, a blood red. Soak the cloth, as before, in the infusion of Tairi, and put it in a solution of 6½ s. w. of alum. Then boil 25 s. w. of Sappan wood for 15 gharis, in 10 sers of water. Cool the decoction and add 25 s. w. of lime water. In this put the cloth, wring, and dry it in the shade.

6th. Shotari, a light brownish drab colour. Take 12½ s. w. of terra japonica, and infuse a whole day in  $\frac{1}{2}$  ser water. Next day add 4 sers of water and soak in it the cloth. Then put this in a solution of 6½ s. w. of Kusis in 5 sers of water. Then wring and dry in the sun.

7th. Torunji, a bright gamboge yellow. Infuse 12½ s. w. of turmeric in 5 sers of cold water, and strain

the infusion. Put in this the cloth. Then put it in a solution of  $6\frac{1}{4}$  s. w. of alum in 5 sers of water, to which has been added 50 s. w. of sour curdled milk. Then dry the cloth in the shade.

8th. Asmani, a light sky blue. Take  $3\frac{1}{8}$  s. w. of native indigo infused in 5 sers water, and soak in it the cloth, rubbing it well. Then add to the indigo water  $3\frac{1}{8}$  s. w. of alum dissolved in a little water, and 25 s.w. of milk, and rub the cloth again in the mixture. Wring and dry it in the sun.

9th. Fakhtah, a bluish ash colour. Put the cloth in an infusion of 50 s. w. of Tairi in 5 sers of water. Then in a solution of  $6\frac{1}{4}$  s. w. of Kusis in 5 sers of water. Dry in the sun, and take  $6\frac{1}{4}$  s. w. of Kachur root (a scitamineous plant mentioned in my account of Puraniya) powdered, and infuse it in 5 sers of water. Put the cloth into this, and dry in the sun.

10th. Shishah, a pale blue compared to lead, but very different. Proceed as in dyeing Fakhtah, but the cloth, after being taken from the infusion of Kachur, is put into an infusion of  $12\frac{1}{2}$  s. w. of country indigo in 5 sers of water, and dried in the sun. It may be also made by omitting the Kachur infusion.

In the whole of these processes the dyers use well water alone, and most of that near Bhagalpur is hard. The sicca weight is rather more than  $179\frac{1}{2}$  grain apothecaries weight; and the ser contains 100 sicca weight, or 2lb. 9oz. avoirdupois weight.  $2\frac{1}{2}$  gharis are equal to 1 European hour.

96. Of the weavers who work in Tasar silk, a few weave cloth entirely of that material, but the quantity is so trifling that I shall take no farther notice of it, and confine myself to detail the accounts of the mixed cloth called Bhagalpuri, because almost the whole of it is woven in the vicinity of that town; for out of 3275 looms, stated to be in the district, 3000 of these were said to be in the Kotwali division. The women of the weavers mostly wind the thread, although the men sometimes assist. These people are so timid, that no great reliance can be placed on what they say; but I shall mention what was stated by two men that came to me at Mungger from Bhagalpur.

A woman takes five pans of Cocoons (405), and puts them in large earthen pot with 600 sicca weight of water, a small mat being placed in the bottom to prevent the cocoons from being burned. A small quantity of potash, tied in a bit of cloth, is put into the pot, along with the cocoons, which are boiled for about an European hour. They are then cooled, the water is changed, and they are again boiled. The water is poured off, and the coccons are put into another pot, where they stand three days in the sun covered with a cloth to exclude insects. On the 4th day they are again boiled, with 200 sicca weight of water, for rather less than an hour, and then poured into a basket, where they are allowed to cool, after which they are washed in cold water, and placed, to dry, on a layer of cow-dung ashes, where they remain spread, and covered with a cloth, for six hours. The woman then picks out such cocoons as are not quite ready for winding, and exposes them for a day or two to the sun, which completes the operation. The outer filaments of the cocoon are then picked off, and form a substance called Jhuri, of which the potters make brushes used for applying a pigment to their vessels. The fibres from 4 or 5 cocoons are then wound off on a miserable conical reel (drawing No. 27), which is twirled round by one hand, while the thread is twisted on the thigh, the cocoons adjusted, and the broken fibres joined by the other. The cocoons, while winding, are not placed in water. This thread is called Lak, and after the Lak has been removed, there remains another inferior kind of filament, called also Jhuri, which is wound off and is purchased by those, who knit strings. Even the cocoons, that have been burst by the moth, are wound off; but owing to the frequent joinings give a weaker silk. When the Tasar is neither very high nor very low, that is, when 405 cocoons cost a rupee at Bhagalpur, a woman boils and winds this number in 10 days. She will obtain from 16 to 18 Paysa weight (58=100 sicca weight) of the good thread, which sells at  $9\frac{1}{2}$  Paysas for the rupee. She gets besides  $2\frac{1}{2}$  Paysas weight of the inner bad thread called Jhuri, which sells for  $\frac{1}{2}$  ana. In a month, therefore she

might wind 1215 cocoons, worth 3 rupees and would procure about 51 Paysa weight (lb.  $2\frac{257}{1000}$ ) of fine thread worth 5 R. 6 A. and  $1\frac{1}{2}$  ana worth of refuse (Jhuri), so that her profit would be 2 R.  $7\frac{1}{2}$  anas. a month, but pots, fire-wood, and unavoidable interruptions necessarily make some reductions; and my informants say, that the women in fact make only from  $1\frac{1}{2}$  to  $1\frac{3}{4}$  R. a month. It is only however, when the cocoons are about a medium price, that they have this great advantage. When the raw material is too cheap, it is not saleable; when scarce, all cannot procure work. The estimate is also made on the supposition that one half of the cocoons wound is of the kind called Dhaba; and the remainder of the kind called Sarihan; the former winds easily, but sells cheap, being coarse; the latter is wound with difficulty, but the finest goods are woven of it alone. Setting aside the refuse as a trifle, every rupee worth of the raw material, when the price is reasonable, will give  $17\frac{9}{2}$  rupees worth of thread or 100 will give nearly 179, or the spinner has 79 per cent. for her trouble. The medium price of the 2 kinds of thread at  $9\frac{1}{2}$  Paysas for the rupee, will be for the pound avoirdupois about 2 R. 6. A.

The kinds of cloth, most usually made, are as follows:—

1st. Duriyas, the warp consists of three parts of cotton, and two parts of Tasar of different colours. The woof is all cotton of one colour, so that the cloth is striped lengthways, and is dyed entirely by the weavers in the thread. The pieces are most usually from 20 to 22 cubits long by  $1\frac{1}{2}$  broad, and on an average sell at 42 anas. The cotton thread costs 22 anas, the Tasar  $10\frac{1}{2}$  anas. A man can weave monthly  $7\frac{1}{2}$  pieces.

2nd. Namunahs are pieces from 20 to 22 cubits long and  $1\frac{3}{4}$  broad; the most common price is 44 anas. The warp contains about 35 parts of cotton thread, and 21 of Tasar, disposed in strips of a different pattern from those of the Duriya. The woof is all cotton. The cotton costs 21 anas, the Tasar 14 anas. The dyeing is done by the weaver, the drugs costing one ana. The loom makes seven pieces a month.

3rd. Chaharkhanahs. The pieces are about 18 cubits long, and  $\frac{5}{6}$  of a cubit wide. The average value is  $2\frac{1}{2}$  Rs.

Each loom weaves  $6\frac{1}{2}$  pieces in the month. The warp requires 10 parts of cotton, and 15 parts of Tasar; the woof 10 parts of cotton and 18 parts of Tasar, so that the pieces are checkered. The cotton thread is worth 6 anas, the tasar 1 R. 6. A. The dyeing costs 4 anas.

4th. Baftahs are pieces of an uniform colour, dyed after being woven. The pieces are of the same size with the Namunahs. All the warp is Tasar, the woof is cotton. The former costs 18 anas, the latter 20 anas; the dyeing and washing cost from 3 to 5 rupees for 20 pieces, or on an average 3 anas. The common price of the pieces is about 3 Rs. (from  $2\frac{1}{2}$  to 5 R.) In the month a loom weaves  $6\frac{1}{2}$  pieces.

The foregoing kinds are mostly made for exportation; the following is mostly made for country use:—

5th. Kharisari are pieces 12 cubits long, and 2 cubits broad. They differ in size and fineness from the Duriyas. The Tasar costs 6 anas, the cotton  $7\frac{1}{2}$  anas; the pieces on an average worth  $1\frac{1}{8}$  R. and a man weaves eight pieces a month. The weaver dyes this kind.

Several other kinds are made; but these are the most important, and their consideration is quite sufficient for the purposes of general estimates. About  $\frac{1}{3}$  of the weavers are employed in weaving the Kharisaris; and it is said, that of every 1000 of the finer kinds 500 are Duriyas, 350 Namunahs, 100 Chaharkhanahs, and 50 Baftahs. Allowing that 2000 looms are employed on the finer goods, and that each works a proportion of the different kinds as above mentioned, each will weave to the value of rather more than 19 R. a month. But 1000 pieces, at the above rates, will amount in value to 2600 R. and the expense will be as follows:—

	Tasar	Cotton	Dyeing	
			R.	A.
350 Namunahs	..	306 4	459 6	21 14
50 Baftahs	..	56 4	62 8	10 0
100 Chaharkhanahs	..	137 8	37 8	25 0
500 Duriyas	..	78 2	687 8	15 10
		578 2	1246 14	72 8

Total 1,897 $\frac{1}{2}$ , but, allowing for trifles, we may take the expense at 1900 R. leaving 700 R. for the weavers. At this rate, on 19 R. woven monthly, he has 5 R. 1 A. 16 $\frac{3}{4}$  G. for his trouble, but he works only nine months in the year, passing the three hot months of spring in marriage festivals, so that the annual gain of each man will be about 46 R. besides what his women make; but many men, who have two or more looms, hire journeymen to work, and they themselves spin and dye. Journey-men make about 2 $\frac{1}{2}$  R. a month; but in procuring a support are greatly assisted by the spinning of their women. Now 2000 looms working nine months in the year at 19 R. a month, will give the total value R. 3,42,000 but it was alleged, that only 2,00,000 R. worth are exported. Two Moguls make advances to about the value of 1,00,000 rupees mostly Duriyas and Namunahs, to be sent to the west of India. The commercial resident at Maldeh advances about 10,000 R. mostly for Baftahs and Namunahs, and about 90,000 Rupees worth are sent by different smaller traders to Calcutta. As usual however in this district the merchants are very cautious in discovering the extent of their trade, and I have no doubt, that the above quantity is woven, and almost entirely exported. The raw materials required will be 49700 R. worth of Tasar thread, and of cotton 1,63,600.

Again a weaver, making coarse goods for country use, weaves monthly eight pieces, value 13 R. Expense, (Tasar silk Rs. 3; Cotton thread 3 Rs. 12 as.) 6 Rs. 12 as. - Profit 6 Rs. 4 as. But many of the weavers work some of the fine, and some of the coarse; I have only separated them for the sake of calculation. At this rate 1000 looms will weave in nine months 117,000 Rupees worth. The value of the raw silk will be 27,000 Rupees and of cotton thread Rupees 33,750.

97. The weavers of cotton cloth in this district were stated to be 6212 houses, having 7279 looms. Taking the average amount which they gave of their work and profit, it was stated that the raw material came to  $\frac{1}{7}$  of the whole value of the cloth, which, so far as I can judge, may be the case. The weavers, however, pretended to a most extraordinary inactivity; and as

they are the musicians employed on almost every occasion, and especially at the tumultuous marriages of this district, I cannot assert that they work more than ten months in the year. The average value of their work was stated at 7 rupees worth of cloth monthly, or rupees 70 a year for each loom, which would only give them rupees 20 for a subsistence, and their women are employed in warping, so that they bring in little or no addition. While employed in festivals they get little more than food, and what will keep their instruments in repair; we may safely therefore reject this calculation, for they in general cannot spend less than from  $2\frac{1}{2}$  to rupees 3 a month. In a good many divisions, indeed, it was admitted that each loom wove to the value of from 8 to 10 rupees a month, while in others they were not ashamed to reduce the whole value of the cloth woven in a month to 4 rupees. I have before estimated that the quantity of cotton yarn disposable for this manufacture is at least worth 5,94,600 rupees; and the thread being  $\frac{5}{7}$  of the value of the cloth, this will amount to 8,32,440 rupees, which will give about 114 rupees worth for each loom in the year, or not quite  $11\frac{1}{2}$  rupees a month for the ten months of labour. The profit will be about 32 rupees a year for the labour of each man and his wife. Although I have allowed 1,20,000 rupees worth of mixed Tasar cloth to be used in the district, although a little (50,000 rupees) is imported, and although the people are very scantily covered both by night and day, yet the above quantity is so small that it will not suffer the smallest diminution; and it is probable that the quantity of cotton imported and number of weavers has been concealed, especially considering the number of woman supposed to spin. In the wilder parts of the district most of the thread belongs to the good women of the country, who give so much a cubic to the weaver for his trouble. Very coarse and thin cloth, from  $1\frac{3}{4}$  to 2 cubits wide, pays on this account  $1\frac{1}{2}$  pan of cowries ( $1\frac{3}{8}$  rupees) a cubit ( $\frac{1}{2}$  yard). The weavers are, however, often paid partly in money, partly in thread, and partly in grain. In the more cleared part of the district, a good deal is made on the same terms, but many weavers there buy the thread and sell the cloth as woven. No person makes advances for it

Perhaps on the whole  $\frac{1}{6}$  may be woven on the weavers own account, and  $\frac{5}{6}$  on account of the spinner. All the cloth is very coarse and of an uncommon thin bad fabric.

98. The weavers of cotton carpets (Sutrunjis) are much on the same footing as in Ronggopur and Puraniya.

99. The tapemaker of Bhagalpur makes also ropes of cotton for tents.

100. Those who knit strings (Patwars) use not only proper silk, but also Tasar silk and cotton, and may make about 3 rupees a month. No advances are made.

101. The chintz makers are on the same footing as in Dinajpur.

102. The blanket weavers work entirely the wool of the long tailed sheep, exactly as in Puraniya.

#### *SECTION 4TH.*

##### *Manufacture of Sugar*

The confectioners of this district prepare from the extract of sugar-cane, not only some of the kind of sugar called Chini, the procees for which has been already detailed, but they make a good deal of a coarser kind called Shukkur, which is that chiefly used on the spot. I have not been able to learn the process.

#### *SECTION 5TH.*

##### *Of the Manufacture of Indigo.*

103. I have nothing new to offer on this subject. The price given for weed is too small. The works are judiciously constructed, and all built of brick. Mr. Christian alleges that fine indigo cannot be prepared from river water; and in support of his opinion says that he employed the same persons to make indigo, at the same works with water both from a well and from river, and the uniform result was, that the indigo made from the latter was of an inferior quality. I know other people who are of an opinion diametrically opposite, and cannot take upon myself to conjecture which is in the right.

I did not hear that any of the native manufacture is continued.

## SECTION 6TH.

*Manufacture of Salt.*

In my account of the natural productions, I have mentioned that soda is found in some parts of the district; but it is merely collected by the washermen, and undergoes no preparation. No other article, except nitre comes under this head.

104. The 94 houses of workmen on the north side of the river are regularly employed by the commercial resident at Patna, on account of the Company. Those on the south side work on their own account, but dispose of part of their nitre to the agent of the commercial resident, and sell the remainder for country use. The agent of the commercial resident residing at Sibgunj, an obliging intelligent man, gave me the following account, which was confirmed by several manufacturers and by what I saw.

The earth containing nitre is called Sora matti, that is nitrous earth, or Muya matti, that is dead earth. On most old mud walls near the bottom, where many animal impurities are generally deposited, this earth effloresces during the dry season; but owing to some unknown circumstance some walls do not produce it. It is not found in cow-houses, because these are kept clean; but it is found in the places (Bathans) where the cattle, that feed in the waste, are assembled at night. It is also found about all old established villages, on the roads and places Gaudahar where the cattle are assembled as they go out or return from pasture, and where the carcasses of the dead are thrown. The efflorescing surfaces may be scraped once in from 8 to 15 days, during dry weather: but rain stops the process for some time. The saline earth procured from old walls is reckoned the best; but both kinds are used indiscriminately, and mixed, as they can be procured. About the 1st of September a space of from 3 to 10 kathas, or from about 5400 to 18000 square feet, is ploughed round each boiler (Kuthi,) and is kept clear of weeds throughout the season. This space is called the Phar, and its use is for spreading out the saline earth to dry. The filtering cistern is rather larger than in Puraniya, but there is no other difference in the apparatus. In each cistern are put about 2 or 3 sers of ashes

from the furnace, with from 15 to 25 baskets of earth, each basket being as much as a man carries on his head, or perhaps 60 lbs. The earth that remains after filtration is called Sithi, is collected in a heap, and kept until next season, when a portion is always mixed with the fresh nitrous earth brought in from the villages, spread out on the Phai to dry, and then filtered. The Ras, Muran, or ley, is boiled in unglazed earthen pots, each containing 10 or 12 lbs. weight; and after some evaporation, the contents of from 10 to 12 of these boilers are thrown into a large wide mouthed jar (Nand). During the night the liquor cools and deposits some nitre. The liquor that remains is called Kahi, is boiled and cooled a second time, and deposits more nitre. The liquor which then remains is called Jarathi, and is thrown on the heap of earth called Sithi. The scummings, called Udiyan, are here thrown away as useless; and the people allege that the Khari-namak comes from Dharhara, in Tirhut, and is prepared from a peculiar earth.

The Company purchases the nitre of the second boiling (Kulmi), which is prepared by the same manufacturer that makes the crude nitre (kachcha). Eight or 10 sers (16 to 20 lbs.) are dissolved in a large pot of boiling water, and allowed to stand for about an hour and a half, when the earth subsides. The clear solution is then taken out by a cup, evaporated to a sufficient degree, and put in a vessel to cool. When cool, the contents are poured on a strainer, which retains the nitre, and allows the ley to run through. This ley also is called Jarathi, and is thrown on the heap of earth called Sithi. The remains of this ley are washed from the nitre by pouring a little cold water on the contents of the strainer. Four sers of raw nitre give 3 sers of Kulmi, such as is exported by the Company to Europe.

On the north side of the river the commercial resident purchases the whole nitre by contract at 2 R. 4 $\frac{3}{4}$ A. a man (82 s. w. the ser), = 84 lbs. 2 $\frac{1}{4}$  oz. avoirdupois. The nitre is delivered on the spot in bulk, and the Company is at the expense of carriage, risk and package. The commercial resident has three agents (Gomashtahs,) at Chhapra, Singgiya and Mau. These make advances to the contractors (Asamis),

who are all natives of the place, wealthy and respectable men. Under the agent of Mau are eight contractors. Babu Gondar, one of these, is contractor for seven Pergunahs, two only of which, Chhai and Pharkiya belong to this district. He again employs agents (Gomashtahs), who reside in the different Pergunahs make advances to the actual manufacturers, receive the nitre from them, and deliver it to the order of the commercial resident. Each of these inferior Gomashtahs, or agents of the contractor, has whatever messengers he requires, he paying their wages; but the commercial resident furnishes each with a badge of authority ; for without that nothing in this country can be done. The contractor makes as much nitre as he can, and refuses no man employment. He advances  $2\frac{1}{6}$  Arcot rupees for the man of 101 s. w. a ser, or rather more than 103 lbs.  $14\frac{3}{4}$  oz. At this rate he pays sicca anas  $42\frac{83}{100}$  for the large man which he delivers to the company for  $36\frac{3}{4}$  anas a small man or at  $45\frac{26}{100}$  anas for the large man; so that he has only 5,674 rupees. profit on 100,000, and out of this he pays all charges of merchandize, and risk of bad debts. He however receives in advance all the money that is necessary. So small a premium or agency, would show a great economy in the management of the Company's concerns ; but, although I have not been able to trace with certainty the circumstances, I have no doubt that this is not a fair statement, and that some source of profit was concealed. One indeed will be afterwards mentioned, but it is only conjectural.

The actual manufacturers are here called Nuniyas, or saltmen and are of many different castes. At each furnace are employed from three to five persons, men and women. The latter boil; the former collect earth and fuel, for which they pay nothing. The quantity made in Chhai and Pharkiya varies from 800 to 1,400 mans, delivered to the Company, according as the season is dry or wet; but the average is about 1,300 mans, the unfavourable years being few. Each furnace therefore makes on an average 9 mans 7 sers heavy weight, for which the owners receive 26 R. 6 A. (Arcot); but these are commonly current. Each

furnace employs two ordinary families, that is two married men and their wives; but each can cultivate a small farm, or can work as a labourer during the season, when there is the greatest demand. In fact most of them have farms of one plough. Some few of them have sheds, under which they boil during days of occasional rain, that happen in the fair season; but none have places in which they can deposit earth for boiling in the rainy season, and they are too necessitous to be able to keep until then the crude nitre for refining.

## DIVISION 2D OF COMMERCE.

### SECTION 1ST

#### *Exports And Imports.*

The accounts which I procured of these were uncommonly defective, the merchants being vastly shy, and much alarmed. In almost every case, where I had an opportunity of forming any estimate, I found that the quantities reported by the traders were rated very much under the real amount ; and that these people carefully concealed the extent of their trade. I have little reliance therefore on the amounts stated in the table; but it will serve to show the nature of the articles in demand, and their proportional importance, as one is likely to be as much diminished as the others.

The rice imported comes mostly from Puraniya and Tirahut, but some comes from Patna. That exported goes to Murshedabad.

The wheat and barley come from Tirahut and Behar; they are exported mostly to Murshedabad and Calcutta a little however goes to Patna and Banaras.

The Maize, Janera, China, Maruya and mixture of barley and pulse are sent to Patna, Banaras and Murshedabad, and come from the eastern corners of Behar and Tirahut.

The But and Kabali-but come from the eastern corner of Behar and are sent to Calcutta and Murshedabad.

The Arahar is sent to the same places, and a little occasionally to Dhaka. That imported comes from Behar and Tirahut.

Please and the pulses called, Bora, Mung, Mashkalai, Khesari and Masur are sent to Murshedabad and Calcutta and come from Tirahut and Behar.

The Kulthi comes from the same quarters.

The rape and mustard seeds go to Calcutta and Murshedabad. That imported comes from Behar and Tirahut.

The Til and Linseed come from Tirahut and are sent to Murshedabad.

The Castor oil seed is imported from Patna.

The oil is sent to Murshedabad and is imported from Virbhumi and Puraniya.

The boiled butter or Ghiu is sent to Calcutta and Murshedabad. That imported comes from Behar and Tirahut.

The milk imported comes from the part of Tirahut immediately opposite to Mungger.

The salt is sent here by the merchants of Mursheda bad. That exported goes partly to Virbhumi and Ramgar but the greater part to Tirahut from Mungger.

The sugar prepared like that which in Europe is called clayed, comes from Patna, Gazipur and Dinajpur by the way of Junggipur.

The extract of sugarcane comes from Behar, Dinajpur and Virbhumi. That exported is sent to Murshedabad and Calcutta.

The treacle and coarse sugar(Shukkur)comes from Patna, Gazipur and Banaras.

The honey is sent to Murshedabad.

The betel-nut comes mostly from Dhaka and a little from Murshedabad, and is sent to Tirahut.

The coconuts come from Calcutta and Dhaka.

The tobacco comes chiefly from Puraniya, with a little from Tirahut, and is exported to Virbhumi and Murshedabad. In Puraniya no mention was made of this commerce. The whole quantity exported from thence was said to be a trifle and part of it only to go to Murshedabad, but by this was probably meant Rajmahal and the places between that and Murshedabad. The hemp buds and leaves used for smoking come from Dinajpur and Yasor.

The indigo is sent to Calcutta, and the indigo seed, according to the season, to various parts in Bengal.

The opium comes from the Company's factory at Patna.

The Mahuya flowers come from Ramgar.

The turmeric and ginger come from Tirahut.

The betle-leaf is imported partly from Tirahut partly from Virbhumi.

The safflower goes partly to Puraniya, partly to Murshedabad.

The Jira seed comes from the adjacent part of Behar, and with the Ajoyan is sent to Murshedabad and Calcutta.

Under the head of Pasari goods are comprehended—

Black pepper, cloves, mace, nutmegs, small cardamoms, camphor, asafoetida, paints, quicksilver, tin leaf, sandhap salt and sandal wood, coming from Calcutta and Murshedabad and sent to Tirahut, Virbhumi, Ramgar and Patna; Abit and Tikhur, a kind of starch like arrow-root, the former dyed red; Mangrela seed (*Nigella sativa*), Fenugreek seed, and medicinal herbs or plants used as dyes, all the produce of the country, sent to Murshedabad; Manjit, Cherata, greater Cardamoms, and some medicinal herbs, from Nepal by the way of Patna.

The wax comes from Patna and is sent to Murshedabad. I suspect that the exports are much larger than here stated.

The catechu or Terra Japonica (kath) is sent to Murshedabad, Dhaka and Puraniya.

The lac mostly goes to Murshedabad, but a little to Virbhumi.

The copper, pewter (justah) tin and lead come from Murshedabad and Calcutta. Of the two latter some is sent to Patna and Tirahut.

The iron imported is from Virbhumi and Ramgar and some is sent to Puraniya, Tirahut and Murshedabad.

The vessels of copper, brass and bell-metal come from Murshedabad and Kangtoya, and are sent to Tirahut and to the fairs of Puraniya,

The iron ware imported consists of flat vessels for boiling milk (Karahi). That exported, consists of arms, sent mostly towards the west, especially to the fair of Hazipur, and of cutlery and tea kettles sent to Calcutta, with some of both kinds to the fairs of Puraniya and Virbhumi.

The hemp and sack cloth made of the Corchorus come from Puraniya.

The hemp of the Crotalaria (Kasmiri San) comes from some parts of Puraniya and is sent to Murshedabad and other parts of Puraniya.

The cotton wool comes from Merzapur and Patna, but some of it by the way of Bhagawangola.

The cotton thread comes from Patna.

The cotton cloth comes from Puraniya, Tirahut and Dhaka and is sent to the fairs in Puraniya, Tirahut and Virbhumi.

It was stated that a good deal of the cocoons called Tasar are imported into this district, most from Behar, but some from Ramgar, and when the season here is unfavourable that may perhaps be the case, but the demand here, so far as I can learn, is nearly adequate to consume the whole raw material produced in the district ; some however is sent to Virbhumi and some to Junggipur. The deficiency, I presume, comes from Ramgar, as on the most careful enquiry at the places through which it must have passed on its way from Behar to Bhagalpur, I could not learn that any had ever been observed passing; and it is an article so bulky that it is not likely to escape notice.

The Bhagalpur cloth is exported partly to the west of India, partly to Calcutta.

The silk cocoons go to Junggipur.

The cloth of proper silk comes from Sibgunj in Puraniya, Kasimbazar and Banaras, and is exported to the fairs in Tirahut and Virbhumi.

The silk thread comes from Sibgunj in Puraniya and goes to Junggipur and Murshedabad.

The Maldehi cloth comes from the town from whence it derives its name.

The cloth of Tasar silk alone comes from Virbhumi;

The Chintz comes from Patna and Gazipur.

The woollen carpets and blankets come from Patna; some is sent into Tirahut.

The gold thread comes from Patna.

The Shals, perfumes and shoes come from Patna.

Shells (Sangkh) and ornaments made of these come from Murshedabad and are sent to Puraniya.

The Manihari goods are of the same kind as in the districts formerly surveyed. They come from Murshedabad, and some are sent to the fairs of Puraniya-Virbhumi and Tirahut.

The paper comes from Patna.

The wooden furniture is mostly sold to passengers; some is sent to Calcutta and to the fairs in Puraniya and Tirahut.

Sakuya, Sisau and other timbers for boat-building, carts and furniture are imported from Nepal and Ramgar by the way of Patna.

The cutting, carriage and sale of timber for posts, beams, implements of agriculture and furniture employs many people, but very little is exported ; the demand is occasioned by supplying from the forests the more cleared parts, especially the three towns. The people who cut are called Baniyatis, but are employed the greater part of their time in cutting bamboos and firewood, and in some parts in making charcoal. A great part of the business, especially the supply of Rajmahal, Murshedbad and Junggipur is conducted by the hill tribes, who pay no rent, as they cut on their own lands ; but the supply of Bhagalpur and Mungger comes chiefly from the lands of the Kharakpur Raja, who takes one half of the whole ; and for the disposal of what he cannot sell on the spot, he has large stores at these towns. Small traders, many of them farmers, keep carts, with which they take these commodities from the woods, paying the cutters on the spot, and carry them to these towns or to the places of embarkation, where they dispose of them to more considerable dealers. In the account of the natural productions the kinds have been mentioned. The logs in general procured in the more level forests are from 5 to 8 cubits long, and only one cubit round at the middle; but the bark and part of the sap has been removed. From 18 to 20 logs are sold for a rupee,

and the cutters load the cart. A few logs, 10 or 12 cubits long and  $1\frac{1}{2}$  cubit round are procured, and loaded on the cart at 4 for the rupee. Europeans have occasionally procured some of still larger dimensions, but to a very trifling extent. From the hills of the Rajmahal range the timber is generally brought in the form of small planks, of posts (Khamba) for huts, of spars for making bedsteads, and of sticks fit for the pestles of oil mills, or for the implement called Dhengki. The planks are of two kinds; Tribands, 6 cubits long, 1 broad and 4 fingers thick; and chaylas,  $3\frac{1}{2}$  cubits long,  $\frac{3}{4}$  cubit broad and 4 fingers thick. The advance price for the former is from 2 to  $2\frac{1}{2}$  R.. for the latter from  $1\frac{3}{4}$  to 2 R. a score, paid to the petty dealers (Beparis), who deliver them at the merchants warehouse, where they may be embarked. From the greater part of the district, the timber that is exported goes chiefly to Murshedabad and to the Puraniya and Nator districts, but from Lakardewani some is floated down the rivers to Virbhumi and, I believe, is sent from thence to Calcutta; but the people on the spot do not know what becomes of it after its being sold in Virbhumi.

The firewood exported is of vastly more importance than the timber, and the three towns of the district require a large quantity. The exportation is chiefly to Junggipur and Murshedabad, from between Paingti and Kalikapur.

A great deal of charcoal is used in the iron forges and by the blacksmiths of Mungger, &c., and as an article of exportation; it is by far the most important produce of the forests. Some is sent to Junggipur and Murshedabad, but the great demand is for the iron mines of Virbhumi, to which it is said about 350,000 mans (each about 60 lb.) are annually sent. The hill people of the southern tribe prepare most of it and deliver it to petty traders, mostly farmers who have small carts, at about 2 anas worth of grain, salt or cloth for the man. The owners of the carts carry it for sale to the forges, where between 5 and 6 mans bring a rupee, but many of these small traders belonging to Virbhumi, the part that they export has been valued at the former rate, while what is exported by the petty

traders of this district has been valued at the price received at the forge.

The canoes are imported from Puraniya.

The bamboo is also a very considerable article of internal commerce, but none is exported.

Mats of reeds (Nal) and of *Scirpus* (Sap) are a small branch of trade. The former go as Dunnage in boats and come from Tirahut; the latter come from Murshedabad.

Reeds and grass for the construction of huts, and the Sabe ropes for tying them together, form a considerable article of internal commerce, but the quantity exported is a mere trifle, and is sent to Murshedabad. Notwithstanding the vast extent of wastes, more is imported, and comes from Tirahut, a better cultivated country.

Some leaves of the *Shorea robusta* or Sal are exported to Murshedabad and Junggipur, and used for platters.

Dhuna, or the resin of the *Shorea robusta*, is sent to Murshedabad. In the dialect of Rajmahal it is called Ral.

The fish is mostly sent to the same place. The quantity in all probability has been considerably underrated. Some dried fish, I know, is sent to Ramgar and the hilly parts of Virbhumi, as I saw many oxen loaded with it passing; but it was not mentioned in any report that I procured from the merchants.

The swine are sent to Ramgar.

The buffaloes are sent to Murshedabad and Virbhumi, and are mostly young males for sacrifice.

Oxen and cows ( $\frac{3}{4}$  of the former) are acknowledged to be exported from the wastes of the south to Murshedabad and Virbhumi; but the people of the northern wastes acknowledge no surplus. This, however, can scarcely be true, and I suspect fully as many are sent from thence as from the southern wastes, but having no authority, farther than suspicion, I cannot enter this in the Tables. In the more cultivated parts some are imported from Puraniya and Patna.

The lime goes to Puraniya.

The wares made of stone consist of hand-mills, stones for rubbing curry stuff, mortars and pestles, cups, platters and images of Siva. Those exported are chiefly

sold to passengers, but from Paingti they are sent direct to Murshedabad. Those imported come from Patna.

The Khari matti or indurated clay goes to Murshedabad.

The Public expenditure in this district is higher than the revenue, so that no deductions require to be made on that account from the balance; but the whole of what the persons employed receive is not expended here; part is remitted, and part is employed in the purchase of commodities brought from other places on their own account. This will make a considerable reduction in the balance. The gains of native officers of this district, that are employed in others, fully compensate for what is carried away by the natives of other districts employed here. One very great addition, however, arises to the balance in favour of this district from the supply of travellers, who are exceedingly numerous, and this subject requires investigation.

I have already mentioned that much wooden furniture, iron and stone ware is sold to such; but I shall here confine myself to the supply of necessaries, food pots and firewood, which they require. Almost every boat passing up or down stops at Mungger, and during a great part of the year the same takes place at Rajmahal, but during the floods the upward bound do not go to the latter place. At both these towns the boatmen purchase rice, pulse, salt, oil, seasoning, firewood, tobacco and betle. A great many boats stop also at Paingti and Sultangunj, and a good many at Suryagarha, Kahalgung, and Bhagalpur. There they receive similar supplies, although to a less extent. During their stay the people consume much curdled milk and fish, and rich passengers procure whatever luxuries the places afford, but we may consider the provisions and firewood as the chief articles of expense. At Rajmahal it was stated that for 8 months in the year, from 100 to 150 boats haled there daily and took in about 10 days provision. In the rainy season the boats amount to as many daily, although the downward bound only touch, because the trade is then more brisk. Each boat, on an average, during its stay, may spend 5 rupees, but it seems to me that the people exaggerated the number of boats, for I do not think that

at Munger the average in the rainy season of both upward and downward bound could be taken at above 75; but no doubt the trade of the Kosi, and other rivers that join between Munger and Rajmahal, makes the latter more frequented than the former. I shall however allow for Rajmahal only 100 boats, which gives an expenditure of 182, 500 R., and those who stop at Munger and other places may expend as much.

Travellers by land also consume a great deal. Few of the natives go in that manner, except troops on their march, and both these and European travellers are very badly supplied at exceeding high prices. The troops, of consequence, must unavoidably commit irregularities, which it is impossible to prevent but by securing to them by legal means a regular supply at a reasonable price. The extortions on European travellers are of little or no importance, as their consumption of articles procured on the road is in general so trifling as to be little or no burthen. The whole demand of people travelling by land on business is not great; but pilgrims make large demands. It cannot be estimated that less than 100,000 pass annually through the district, and remain in it at least 16 days; less than 1 ana a day cannot be allowed for the daily subsistence of each, which will be on the whole 100,000R. It is however very much to be doubted whether the district gains by this, for as many of the pilgrims as have any pretensions, live by begging, and the loss by these probably counter-balances the profits of supplying the others.

The only thing that can be called external commerce is with the hill tribes, but I have included it in the above estimate, as the whole goes through the hands of the people of this district. Their exports consist of grain, indurated clay, timber, firewood, charcoal, honey and wax. Their imports are cloths, iron, copper, brass and bell-metal wares, rice, fish, cattle, oil, spices and salt. At present the hill tribes feel much inconvenience from there being few or no market-places near them, and it would probably contribute much to their improvement and convenience could a regular market-place be established in the midst of each tribe, at the places where I have proposed fixing the superintendents.

**SECTION 2D.***Of the Persons by whom Commerce is conducted.*

In the Index to the map will be found an estimate of the number of persons thus engaged in each division, with an estimate of their capitals employed in trade. This was taken from the most intelligent of them that were willing to communicate, but I think that in general they were afraid and concealed the extent of their dealings.

The Company's dealings in this district are very considerable, and consist of a little silk, Bhagalpuri cloth and saltpetre. There are besides the following descriptions of dealers.

The Goldars, in some places here as well as in Puraniya, are divided into several kinds, Goldars, Garlas and Keranas, but these terms are not used uniformly in the same sense. Some, however, deal in grain alone; others deal in grain, boiled butter or Ghiu, salt, tobacco and betle; others deal in salt and the metals, and a few of these deal in timber; and finally, others deal in boiled butter alone. All are Goldars and Mahajans. These wholesale traders are mostly natives of the places where they trade. In some places here the term Goldar is applied to petty retailers, who sell timber, bamboos and firewood.

In this district are no Kengiyas, who deal in the articles in which the Goldars trade; but some deal in cloth. These however are not considered as forming a distinct class.

There are no Gosaing merchants of consequence; some few of these men trade, but only as petty dealers.

The dealers in Bhagalpuri cloth are next in importance. Four houses of Moguls from the west come here annually or send their agents, make advances, and carry home a cargo of about 100,000 R. The bankers (Kothiwals), European and native, the surgeon of the station, and the more wealthy dealers in cloth export the same commodity. The latter have capitals of from 300 to 2000 R. but are also retailers; about  $\frac{1}{4}$  of them are strangers.

The next class are merchants who import cotton wool (Rui Ka Mahajans), mostly natives, but a few come

from Merzapur. Some of the Goldars (Keranas) deal also in cotton.

Next to these are some who import tobacco. They are natives of this district or of Puraniya.

Next to these are some who import copper, brass and bellmetal vessels. One half of them are strangers,

A few druggists (Pasaris) import by wholesale, but they all retail.

There are some wholesale dealers in firewood and timber (Kathaiyas), and the same persons export the indurated clay called Khari matti. Many of them are strangers.

Some also export charcoal (Koela Furosh), but many of both these descriptions are only Beparis.

Some dealers in birds export cargoes to Calcutta. See account of the natural productions.

The merchants who come in boats, sell an investment and purchase another, do not frequent this district so much as even Puraniya, but many boats passing purchase trifling articles, especially wares made of timber, iron and stone and sell trifling articles such as perfumes, embroidered slippers, &c.

On the banks of the Ganges are some Pajaris who export fish as in Puraniya.

Proceeding as in Puraniya, I shall give a list of the shopkeepers, referring to the list given in the account of that district where nothing new occurs. I must however premise that the shopkeepers are divided into the same 5 kinds that have been mentioned in that account, only that many petty dealers who have shops (Chandina Dokandars) are here called Phariyas. The same is also the case in Puraniya although I did not notice it.

The Amdehwalehs, as in Puraniya, are confined to the Bengalese part of the district. In Behar Paikars and small merchants (Mahajans) deal in the same manner as in Puraniya.

Modis are very numerous and are also called Baniya and Khichri Furosh. Here they do not entertain strangers, the low rank of those who keep inns having rendered the profession discreditable. Most of the Modis deal in small money (Cowries and Paysas); some sell sweetmeats, and in Lakardewani they purchase all

the produce of the country and sell it to Beparis, who export it.

Nuniyas, called here also Nimaki Phariyas.

Chaoi ka Phariyas.

Kathengjas.

Tatwalehs who retail sack-cloth, with capitals of from 20 to 30 R.

Pasaris. In some places the druggists deal in cowries and cotton cloth. In others, drugs are sold by those who retail provisions.

Jhalwalehs, or retailers of hot seasoning, are here most commonly called Khattik.

Pan supariwalehs, who retail betel leaf and nut. These are chiefly confined to the Bengalese part of the district.

Tombulis, who sell betel leaf and lime alone, have capitals of from 2 to 4 rupees. In Behar the sellers of provisions usually retail the betel-nut.

Gurwalehs.

Ghiuwalehs, who retail ghiu.

Butter makers and retailers for the use of Europeans chiefly (Makkhaniyas).

Telis who only retail oil and do not express it.

Gangjawalehs, retailers of hemp buds.

Basanwalehs or Basaniyas.

Dealers in Manihari goods are here usually called Besatis.

Jutawalehs or churminah furosh, who purchase shoes from the makers, and retail them. They have capitals of from 20 to 40 R.

Cotton paikars and Phariyas.

Cotton thread retailers buy from the spinners and sell to manufacturers. They have trifling capitals.

Ghorghatiyas, who retail turners and basket makers wares, and also walking staffs.

Kathariyas or Kathaiyas or Khambahwalehs are sometimes here called Goldars. They deal also in mats.

Ghaska Goldars, who retail thatch and reeds, have capitals of from 20 to 40 R.

Gandhi or perfumers.

Murgiwalehs, who retail poultry.

Buzaz or drapers, who in some places are also money changers.

Kapariya Paikars.

Kungjras or Mahifurosh, fishmongers.

Do. Dealers in vegetables. The same persons often deal in both articles.

Retailers of potters ware, Bartanwaleh or Hangri-waleh.

Bhathiyaras, persons of the same low kind, that keep inns, and who sell such things as travellers want but have no lodgings.

The tradesmen who retail in shops are as follows:—

	No.		No.
Kumar ..	75	Teli ..	.. 52
Patwar ..	100	Sungturash ..	.. 80
Laheri ..	33	Sikulgur ..	.. 92
Lohar ..	66	Naychahbund ..	.. 86
Carpenters ..	67	Basket-makers ..	.. 40
Chamar ..	43	Goyalas or Dahiyras ..	.. 53
Dhuniyas ..	93	Puya & Phulauris ..	.. 58
Halwai ..	57	Mayra ..	.. 55
Muraris ..	56	Dalhari ..	.. 61
Bhujaru or ..	59	Nanwai ..	.. 62
Bhunaru			
Kussab ..	64	Bukur kussab ..	.. 63
Maydawaleh)	60	Tobacconists ..	.. 46
Atawalehs )			
Atushbaz ..	45	Shurabwalehs ..	.. 49
		or Kulal	
Kangghai ..	74	Churisaz or ..	.. 34
walehs		Churigur	
Malakar or ..	36	Pasi or Tariwaleh ..	.. 51
Mali			
Soapmakers ..	23	Coppersmiths ..	.. 82
		(Kasera)	

Retailers of brass ornaments (Thathera) .. 82

Rangdhalyas 84 .. Turners .. 73

The Paikars here are exactly on the same footing as in Puraniya, and those who abstain from keeping cattle are not many, but the Baldiya or Ladu-beparis are exceedingly numerous and purchase a great proportion of the commodities in the interior, carry them to the towns on the Ganges and there again make purchases which they carry back to the traders of the interior.

They of course deal in everything, but as they have quick returns and short journeys they have very little capital except their cattle. The dealers in firewood, thatch, ropes, charcoal and timber properly belong to this class although often called by other names. In the southern and eastern corners a good many strangers of this description belonging to Virbhumi and Behar carry on this commerce, which is highly advantageous as tending to check the system of advances. Near the Ganges some of them have small boats with which they trade during the floods when the roads are impracticable.

The Grihastha-beparis here are exactly on the same footing as in Puraniya, and deal chiefly in grain or the Mahua flowers. There are none of them rich.

The Pheriwalehs or pedlars here deal scarcely in anything except copper, brass and bell metal wares, and have capitals of from 700 to 800 R.

The brokers are partly employed in the eastern parts to purchase silk, and partly in the western parts to purchase whatever is wanted, but chiefly grain.

The Kothiwals or bankers are on the same footing as in Puraniya. Two indigo planters deal in bills of exchange, and one of them to a greater extent than any person in the district. Of the natives one house belongs to the place, the others are strangers. They take bank notes at a small discount, of from  $\frac{1}{2}$  to 1 per cent.

Both those who change gold and silver, and those who deal in copper money and cowries are usually called Surrabs, although Fotdar is also a term known for the latter people. Many Modis, druggists, and drapers deal in small money, and some of the Surrabs in their turn deal in cloth and cotton. Both kinds of Surrabs and Modis advance money or provisions, to those who are living on monthly wages, are allowances.

In the district are seven Rokari or Nukudi Mahajans, who lend money as in Ronggopur. They have capitals of from 10 to 50,000 rupees. Two of them in Munger formerly dealt in bills of exchange, and on that account are called Kothiwals, but have of late given up that branch of commerce, owing probably to the introduction of bank notes.

## SECTION 3d.

*Of the places where commerce is carried on.*

In the account of Dinajpur a sufficient account has been given of the nature of these and for their number I must refer to the Index to the map, made on the same plan as that of Ronggopur, but as full as possible.

The people here are somewhat less addicted to markets than those of Bengal, and deal more with shop-keepers, or with traders, who have small warehouses.

The same complaints concerning illegal exactions, taken at market places, exist here as elsewhere, and it is alleged, that they are usually made in the name of God, some pretended religious mendicant being appointed by the Zemindar to collect money for the celebration of some ceremony, or for the support of some place of worship ; but a trifle merely is expended, and the remainder is divided between the mendicant and the Zemindar. Farther, in every great market the Zemindars erect sheds, and take duties from those who use them ; and it is alleged, that none are allowed to sell articles of any amount who do not use these sheds. The Company, when the duties on the market places were abolished, purchased the land, and the right to erect such sheds, should be perhaps reserved to government, and might be made a source of revenue. It is farther alleged, that all the understrappers of police help themselves to whatever they want, and the difficulty of procuring anything whatever at the capital, is by many attributed to this practice. I have already said that I am very sceptical concerning these practises being so common, or at least being carried to such an extent, as is usually alleged, but there can be no doubt that the police of the three towns in this district and of most of the market places on the great road is exceedingly defective in respect to furnishing supplies as well as in every other point, and I again beg leave to recommend most strongly the consideration of a municipal government for such places.

✓ During the Mogul government it would appear that in towns every trade had a chief called by various names, such as Chauduri, Mistri Dangriya, &c., who

received petty fees from his associates, represented all grievances to the officers of government, regulated the prices of labour and commodities, settled petty disputes, and supplied any large demands, such as when persons of rank, or bodies of troops passed. Some of these persons have still the (Purwanahs) grants made to them or their fathers, either by Mogul officers, or by the collectors who succeeded ; and in the three towns, every trade still continues to obey very implicitly the orders of some such person, although now, I believe, they have no legal authority. In fact, I find that the only thing which these people now attempt to do, is to fleece the Europeans, who may pass. No person but these men will sell anything to an European's servant, or perform for him any service, and these persons fix prices altogether unreasonable, must be always paid in advance, and very often perform what they have stipulated in a very inadequate manner. The only remedy is a civil action, probably to be tried two or three years afterwards, and in which the witnesses must perhaps be sent some hundred miles. This is a complete bar to every complaint. At some principal market places on the road, one person of this description (Chaudhuri or Dangriya) has a superintendence over the whole, and acts much in the same manner,~~X~~ I would propose, that in the chief towns at least, such persons should be legally appointed from year to year, and selected by the magistrate from among the most respectable persons of the trade or profession ; and that in the appointment the inclination of the members of the trade or profession should on all occasions be consulted. The duties of the persons selected should be the same as in the Mogul government. In the same manner the general charge of the police in these towns should be entrusted to one or more chief merchants or traders, who should be annually appointed, with the consent and approbation of the Chaudhuris, and who should also act as commissioners for the decision of petty suits. Duties of course should be levied to defray the expense of the establishment in clerks and messengers ; and for keeping the roads through the town clean and practicable.

## SECTION 4th.

*of coins, weights and measures.*

I have little to add to what I have formerly said concerning coins. The Calcutta Kuldar rupees are by far the most common currency, and not above  $\frac{1}{4}$  of them have been marked. Other rupees pay a Batta, or deduction, except in the purchase of cloths, all of which are sold for inferior money. Gold has almost entirely disappeared; and, if wanted, must be purchased at from  $16\frac{1}{2}$  to  $16\frac{3}{4}$  rupees for the Mohur. In the Behar part of the district, copper money is much more common than cowries, and even in the Bengalese part it is current. The common Paysas, or copper money are Lohiya, or Herba, and Gorakpuri. The latter or pure copper, the former are said to be adulterated with iron. The marks are totally worn away, and no one can tell by whom they were or are made. The average value is 64 for a rupee; but it is constantly fluctuating, according to the operations of the money changers. In the S. W. part of the district, coin is seldom seen, and most commercial transactions are carried on by exchange of commodities. At the capital almost everything is sold by an imaginary money called Taka, the name which in Bengal is given to the rupee. The Taka, of Bhagulpur contains two paysas, each paysa 64 cowries.

All that I have said in my account of Dinajpur concerning weights, is applicable to this district. The Paseri varies from 5 to 14 sers. The weights in general are regulated by a copper coin called the Madhusahi Paysa, which is not current, and very seldom procurable; so that no proper means of detecting false weights exist. Some people indeed pretend to have iron or stone weights that are of the regular standard, but I know not how they could be taken in evidence. It is also alleged, that the ser of 80 sicca weight is equal exactly to  $46\frac{12}{15}$  Madhusahi Paysas; but for the sake of calculation it is usual to take  $46\frac{1}{2}$ . In the former case, taking the s. w. at  $\frac{1}{80}$  of a Calcutta ser, the Madhusahi Paysa will be nearly  $309\frac{8}{15}$  grains.

Except in beating rice to free it from the husk, no grain measures are used, everything is sold by

weight. In the forests, the women who beat rice receive the rough grain, and deliver the clean by a measure called Paliya, which is said to contain about  $\frac{3}{6}$  of 100 s. w.; but as the same individual measure is used in receiving and delivering, its capacity is of no consequence. At the three towns are professed weighers (Kayals), and on many estates there is a weigher of grain in every manor. He is not sworn, nor, if detected in fraud, is he liable to any extraordinary punishment. Among the natives it is generally admitted, that vast frauds are committed by the sleight-of-hand in weighers, and to this was attributed the apparent lowness of the profits which the contractor for salt-petre has. When I asked at other persons, whether he had given me a fair account, and how he came to be contented with 5 per cent. for all charges and risks of merchandise, it was answered, that he weighed the salt.

A few years ago most of the weights were stamped, by order of the magistrate, and none, except such as have been stamped, are considered as legal. With such a want of a standard, the expedient of stamping is perhaps dangerous, leaving room for the most atrocious frauds and corruption.

The land is mostly measured by a pole, and here this is laid on the ground, and a mark made at each length. This is vastly superior to the extraordinary plan adapted in Puraniya; and is not liable to many objections that arise from the use of a rope; but in this manner it is very difficult to measure any line straight, and every deviation is in favour of the landlord. The number of rods in each Katha varies extremely, and even the cubit differs much in length. The length of a man's fore arm and hand is the standard in common use, and is supposed to be divided into 7 Girahs; but the cubit in use varies from 7 to 9 Girahs. In every other part that I have been, the bigah consists of 20 Kathas, but in many parts of this district it contains only 18. No standards are to be found in the collector's office, where it is only known whether the customary bigah of each Pergunah contains 18 or 20 Kathas, but the number of cubits in each Katha, and the size of the cubits, have not been recorded.

In some parts, however, the people have a yard and cubit, used chiefly for measuring cloth, and, where such are used, they were stamped at the same time with the weights. The people here have only one name (Guz) for both measures.

#### SECTION 5th.

##### *Concerning the conveyance of goods.*

As will appear from the account of the rivers, a great part of the district is not at all provided with water carriage ; and, even on the banks of the great river the natives possess many fewer boats than I expected.

The Ulaks, formerly described, are the boats most commonly employed in the transportation of goods ; and are in general small, none exceeding 1700 mans, and most being under 800.

The Patelas are rather fewer in number than the Ulaks, and about the same burthen ; and, as I have mentioned in my account of Puraniya, differ only from the Koshas of that district in being wider in proportion to their length. The hire of these two descriptions of boats from Mungger to Calcutta, when the whole channel of the Bhagirathi is navigable, is from 10 to 14 R. for the 100 mans burthen, reckoned by the quantity of grain which the boat might carry. The ser is equal to 84 s. w. the 100 mans, therefore, are equal to 77 cwt. The distance is about 300 miles.

In the eastern parts of the district some boats of large dimensions are used, during the floods, to convey fire-wood ; but having been there in the dry season, I had no opportunity of seeing their structure.

Both men and boats are difficult to procure, although many of the boats are professedly kept for hire, and the office of Ghat Majhi, here as elsewhere, would require to be regulated. So difficult is it to procure boats, that at Kumargunj almost all the trade with Mungger and Bhagalpur is carried on by means of carts or oxen, although it stands on the bank of the river about half way between the two places.

The boats called Dinggis, such as I have described in my account of Puraniya, are a good deal used ; but many boats called Dinggis are clinker built, and on the

Pateli construction. On so large and tempestuous a river as the Ganges these are very dangerous.

Except the Nawab at Rajmahal, none of the natives possess boats of any kind accommodated for pleasure or travelling ; but in the eastern divisions a tilt is occasionally put over the after part of a Dinggi, which is then called a Pansi, and accommodates travellers.

Canoes are not much used, except in the eastern parts of the district, and in the inundated parts farther west the people are very much confined during the floods, and in cases of an inundation uncommonly high, have in general no means of escape. The Tal tree, so commonly used south from Calcutta, as a conveyance during the floods, is neglected everywhere here except in Kalikapur, although it is very common.

In Lakardewani advantage is taken of the floods to float timber and bamboos down the torrents, but in Kharakpur and Gidhaur this is entirely neglected. In Kalikapur again, towards the close of the season, when the water becomes scarce, floats are conducted down the creeks by making dams, and collecting the water, so as to render it deep enough to carry the floats for some way. When the float reaches the dam, another is made some way lower down, and the former one is broken to transmit the float. This is a very rude commencement of the art of constructing locks.

The greater part of the internal commerce of the district is carried on by carts, and back loads ; but the roads are exceedingly bad. By far the most frequented and important road in Bengal, leading from Calcutta to Patna by Murshedabad, passes through the whole length of the district ; but for from two to three months every year it is not possible with any sort of carriage, or even with loaded cattle ; and, even at other seasons, a four-wheeled carriage or waggon could pass with much difficulty, and some danger. There is in particular a great deficiency of bridges, and the descents into many of the creeks is so steep as to impede very much the passage, and to diminish the load of carts. In many parts there is an abundance of hard materials, with which permanent roads might be made ; but, as in others these materials are too

remote, and as one bad place renders the whole useless as a line of communication, no attempt at improvement farther than what I have formerly recommended, should perhaps be made. A great part of the labour of the convicts, as usual is employed in making roads near the capital and Mungger, which, although no doubt of some use, are chiefly intended to give the European ladies an opportunity of taking an evening ride ; and much also, as usual, is wasted on keeping the grounds of the Europeans in neat order. Were the whole bestowed on the great road, it might be kept in tolerable repair, during nine months in the year, and might be gradually so raised, as to be easily practicable at all seasons on foot. This care might be also extended to the branch from Paingti to the great road, which opens the communication with Puraniya, and is only a few miles in length.

Another line of public communication is still wanted there is no road between Bhagalpur and Virbhumi, so that the judges of circuit must return from the latter place to Murshedabad before they proceed to Bhagalpur. This appears to me a line of the utmost importance, and its formation would, I have no doubt, tend very much to improve the neglected interior parts of both districts ; but the labour of the convicts, I am afraid, would be totally inadequate to the purpose, and indeed is scarcely sufficient, with every attention, to keep the present great road in order. Immediately south from Bhagalpur is a considerable extent of very low land, through which a road can only be made by raising a mound ; at present it is impassable for more than four months in the year, and all commerce with the interior is completely at a stand. After reaching the high land, although in general the soil is dry and firm, there are many interruptions. Many very narrow valleys of rice ground wind through the swelling grounds in all directions, and, until the beginning of December, cut off all communication. In every part there, however, there is such an abundance of hard materials, that the constructing causeways across these valleys would be an easy work, and timber is so plenty, that bridges could be of very little expense ; for each valley would require at least one bridge, to allow the water to pass from one field to another. As a means

for carrying this work into execution I would propose, that a tax should be levied on all pilgrims going to Baidyanath, and on this account, that the road should lead by that place from the capitals of the two districts. This, it is true, would not be the most direct line, but the inconvenience arising from the circuit would be compensated by the means of facilitating the passage, and of accommodating the native travellers. All the remarks made on the roads of Puraniya are applicable to this district, except that here there is very little of the sandy bare plain, which there so much facilitates travelling.

Very much to the credit of Mr. Christian, an Indigo planter, he has made a road, better almost than any in the district, from his factory in Chandan to the river side near Suryagarha.

The structure of the carts used in this district, I have already explained. Near the Ganges many are kept for hire, and receive  $4\frac{1}{2}$  anas a day, including  $\frac{1}{2}$  ana given for the driver's food. The little rude carts in the forests are as exceeding great convenience, as they go in almost any road.

Horses are not kept for carriage so much as in Puraniya, although all through the Behar part of the district there are some. They are nearly of the same quality with those in Puraniya, but rather worse, and more wretched. The mares are wrought, as much as the horses.

The Baldiya or Ladubeparies are very numerous and have many cattle, which they are willing to hire, when they have no speculation in view, and their cattle are very good. The rate of hire is the same as in Puraniya.

Porters are only used to unload boats, or to convey passengers' baggage.

In every part of the district, except Mungger, there is the usual difficulty in procuring conveyance of any kind; but at Mungger, no difficulty occurs in procuring good oxen and porters, at a very reasonable rate. I cannot yet judge, how they will perform their duty.

On the great road a good deal of attention is paid to establish proper ferries, and the boats are very good and

safe conveyances. On the more important ferries on the great river no attention greater than in Puraniya is shown by the police, and most of the Dinggis, being of the Pateli construction, are exceedingly unsafe on such a river. The boatmen are appointed by the Zemindars, who annually receive a rent given under the name of homage (Salami).

The Sadabratas, or places where travellers experience a hospitable reception, are not numerous. Some of them belong to Muhammedans, who receive the pagan as well as the faithful ; nor are the Hindus deficient in liberality, all sects being entertained, wherever the place is called a Sadabrat. Some places of entertainment however receive only religious men, and are called Akharas. On the north side of the Ganges, in the division of Lokmanpur, all religious mendicants may apply to the chief farmer (Jethraiyat) of the place, and obtain a supply of food. The farmer levies the expense by shares from his neighbours.

The Modis here do not entertain strangers, so that in the greater part of the district travellers are but poorly accommodated. This is especially the case in the Mallepur division, where no one except some foreign traders at Mallepur will receive into his house any stranger even a Brahman. This is owing to an excessive jealousy of their women. On the great road however more attention is shown to the real convenience of travellers, than in any part of India, which I have yet visited ; and regular inns (Sarays or Bhathiayarkhanahs) are kept at convenient distances. Each inn consists of a number of distinct chambers ; which are let by the night to any traveller or company, 8 or 10 persons travelling together often occupying one chamber. The chamber usually consists of a wretched straw hut, 7 or 8 cubits long and 5 or 6 wide, and is in general totally destitute of furniture ; a few only afford a little straw or a mat to sleep on ; but some, kept by obliging nymphs, have bedsteads, where favourites are received. The Bhathiayaras or keepers are low Muhammedans, such attention to strangers being incompatible with Hindu reserve ; and many of their women, but by no means, the greater part, refuse no favour to a liberal customer.

Each keeper, according to his means, has a number of chambers, which are usually disposed in a row (*Alang*) ; and in most inns are several keepers, whose rows of chambers surround squares or wide lanes, in which the cattle or carriages of the travellers stand. Hindus pay from 1 to 2 Paysas ( $\frac{1}{64}$  to  $\frac{1}{32}$  Rs.) a night for each chamber and Muhammedans pay double, because the Bhathiyan cooks for them. The keeper generally retails fire-wood, tobacco and the charcoal balls used in smoking and purchases for his guests whatever other articles they want. Some of them also retail earthen ware, and shoes. Hindus of the highest rank can sleep in such places, when no pure person will give them accommodation ; but they of course can receive little or no assistance from the keeper, who cannot bring water that the guest will use, nor can the Brahman cook in the inn. He must go to some pure place, and for that purpose usually selects the side of a river, which in this country is the most common abode of Cloacina. In the Muhammedan government there had been erected an inn of brick at Rajmahal, which was a square surrounded by numerous small chambers, managed exactly in the same manner as above described. These have now become quite ruinous, and the keepers have erected huts in the square. Col. Hutchinson, late superintendent of the invalid establishment, built two wretched inns of brick, totally destitute of elegance, and containing very small accommodation. They are much neglected, and the keepers prefer their straw huts ; because, as they allege, every petty messenger belonging to the police or any other public establishment, insisted on using the chambers without payment, and even accommodated their horses in the rooms.

At the different invalid villages near the great road the same gentleman, built a number of bungalows, intended partly I believe, for his own accommodation, when he visited his charge, and partly for the accommodation of European gentlemen travelling the great road. These bungalows probably have cost the public much, and the accommodation, which they afford, is very trifling. Were they at regular convenient distances, so that officers travelling from Berhampore to Dinapore

might go on horseback by stages, and find every night a place of accommodation, and were this kind of accommodation, extended on one hand to Dilli, and on the other to Calcutta, it might be useful, although without reliefs of horses, and accommodations to enable a person to travel without servants, little more progress could be made, than in travelling by water. As no change of horses can be procured, and as no man can go the road without waiting for servants to bring him food and raiment, these bungalows may on the whole be considered as not at all facilitating the progress of the traveller, although no doubt they have on some occasions proved a convenience to persons laying horses for short distances, or to those going post by palanquin, when these have been overcome with heat and fatigue; but the service of which they have been, has been so trifling, that their construction must be considered as a waste of money, and even there repair would be superfluous. Most of them are now very ruinous.

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## LIST OF HILLS IN THE BHAGALPUR DISTRICT.

Referring by number to those in each sub-division of the maps.

1. Division Kotwali, no hills.
2. Division Ratnagunj:—
  1. Jathaur. 2. Sathara
  3. Nakra. 4. Bharam
3. Division Kodwar, no hills.
4. Division Lokmanpur, no hills.
5. Division Gogri, no hills.
6. Division Kangwargunj:—
 

1 Memuda	2 Deharithan
3 Amjhar	4 Bhurbhuri
5 Vishnu Singha	6 Nauyaghirkhi
7 Mahadev mandir	8 Gaurinath Pahar
9 Khajebayiskarni ka-durgah	
7. Division Mungger:—
 

1 Gulalpur ka pahar	2 Keriya
3 Murali	4 Bibi Gaddadh
5 Pirpahari	6 Bhabta
7 Bakarpur ka	8 Patharghat
Pahar.	
9 Hardiyabad	10 Kespurka Pahar
11 Gera	12 Baisa
13 Mirzapur or Baradahar	Pahar
8. Division Suryagarha:—
 

1 Leipahar.	2 Uren
3 Abhayapur ka	4 Kalithan or Dharraha
Pahar.	
5 Jugi Pahar	9 Mohanpur ka Pahar
7 Khoso Pahar	8 Khosalpurer Pahar
9 Siyori	10 Dudhuya
9. Division Mallepur:—
 

1 Ladhan	2 Sirsa
3 Ghoramara	4 Pat Pahari
5 Kangriya	6 Digur

7	Kusamghati	8	Tugha
9	Harhara	10	Murali
11	Sukduyar	12	Gando Pahar
13	Sukhaniya	14	Asta
15	Kumeli	16	Megha
17	Dharbe or Mahadwar.	18	Gidko
19	Jhajha	20	Harhangja
21	Bamuni	22	Machhandra
23	Seba	24	Patharghatta
25	Majhgaing	26	Pach Pahar
27	Dhaona or Pahar- pur ka Pahar.	28	Dada
29	Telsanda	30	Salai
31	Dharhar	32	Gideswari
33	Andhala	34	Chaongta
35	Bhalguya	36	Miyada
37	Kuljighat	38	Bheongsarghat
39	Bhaluyana Gahar	40	Basanti
41	Tengra	42	Asbi
43	Abhaynath	44	Gordhoya
45	Ghorsar	46	Pachbhur
47	Maniyara	48	Mohaniya
49	Gangrghaski	50	Amkuliya
51	Gogakon	52	Goga
53	Bangskati	54	Soyardob
55	Barare	56	Gulni
57	Bangskur	58	Bhaluyahi
59	Charki	60	Bhuika Pahar
61	Banai pahar	62	Silat Pahar
63	Gaduriya	64	Dhansir
65	Pacheswari	66	Papra
67	Chamra	68	Bewa
69	Lakhai	70	Gobra
71	Palat	72	Khamri Pahar
73	Charki pahar.	74	Baghma
75	Dhansi	76	Kusambhi
77	Tikathar	78	Bandarchong
79	Kukur Jhapghat	80	Jhajha
81	Singrik	82	Turakiniya
83	Gidhoyash	84	Kanimau
85	Sechani	86	Dewarsenghat

87	Barabarthan	88	Kutiya
89	Egara	90	Morade
91	Madhuri	92	Deoghara
93	Amrahakol	94	Goraiya
95	Bij pahari	96	Sakhai
97	Kotha	98	Marak
99	Binak	100	Kareli kol or Kareli pahar
101	Jatkutiya	102	Gidha
103	Kalithan	104	Baramasiya or Haha
105	Dhobghati	106	Turakiniya
107	Bandarchongga	108	Mogulmara
109	Amjhar	110	Bhaongrkhan
111	Keduya	112	Satkunda
113	Dasduyar	114	Khirkhiriya
115	Dhobghat	116	Madhamauya
117	Ghati	118	Nilaghat
119	Saraiyamahila	120	Dasduyar
121	Gabsiya	122	Dehari
123	Narayanpurer pahar.	124	Mai
125	Keduya	126	Gili
127	Kadir	128	Kusambhi
129	Ropa	130	Tarari
131	Singga	132	Turakiniya
133	Bakaya	134	Siyur
135	Pangchkumar	136	Pathara
137	Asurnikhan	138	Kukurjhop
139	Duili	140	Lakhan
141	Kauyatalmal	142	Lohojora

## 10. Division Tarapur:—

1	Kheriya	2	Nari
3	Banatha	4	Pachkatiya
5	Dhol pahar or Gaurinath math.	6	Jayetpur or Khejuriya
7	Chengotiya pahar	8	Belsira pahar
9	Kala pahar	10	Kaphri pahar
11	Phoki	12	Murpa
13	Karighati	14	Thari
15	Phulidumur or Itari	16	Gorgangwa
17	Dhankuriya	18	Rauta

19	Ghutiya	20	Hakikiya
21	Bangsmata	22	Madgiri
23	Tahuyarnagar Pahar.	24	Teturiya
25	Amraha	26	Bara Pahar
27	Sarkata	28	Trisuli
29	Nara	30	Kasmo
31	Amjhar	32	Chenggakhar
33	Beharu	34	Bhusi Pahar
35	Kharara Pahar	36	Bhikha
37	Simarka Pahar	38	Piluya
39	Bela	40	Chhatiyani
41	Sikarhar	42	Patner
43	Sukurwari	44	Kanadi
45	Trisuliya	46	Khuranda Pahar
47	Mandaha Pahar	48	Banawari
49	Kachanpuri	50	Dewa
51	Siyurtangr	52	Dhorani
53	Pangrariya	54	Gauripur Pahar
55	Emamnagar ka Pahar.	56	Bhairava Pahar
57	Ungchanath	58	Digra
59	Biram	60	Matathan
61	Nakra	62	Rangganath
63	Sarma	64	Khoranda
65	Manikthan	66	Bhalun or Tatalpani
67	Mahadeva	68	Dhamdhama
69	Bagathar	70	Gargha
71	Chamra	72	Dhanabandh
73	Mali	74	Amin
75	Karaha	76	Karma
77	Keruyadalan	78	Karmegh
79	Ratam	80	Goparan
81	Garera	82	Sidhai
83	Sawasin	84	Biswambhara
85	Pichhri	86	Badariya
87	Murla	88	Kutiya
89	Dhawa	90	Bharra
91	Dhawaghati.	92	Nandana bathan
93	Digariya	94	Bandarchui
95	Ghorakhor	96	Maharda
97	Arariya.	98	Bhera

99	Bhandariya,	100	Thari
110	Jalkunda	102	Sitakabar
103	Dima	104	Mayen
105	Dwarba	106	Bhaluyar
107	Bhayisa	108	Kharikhan or Mayra
109	Bhudharani or Rishikunda.	110	Tabkuyani
111	Kailidamki	112	Bondabar
113	Mangjarna- chan.	114	Kharna
115	Joroedamki	116	Hatgar
117	Amjhar		

## 11. Division Bangka:—

1	Dodhari Bara	2	Dodhari Chhota
3	Ratatiya	4	Suyordob
5	Sarkata	6	Sarchuri
7	Murali	8	Matathan
9	Kathali	10	Kusmaha
11	Madardaha	12	Amdanikop
13	Naridol	14	Niliatari
15	Gautara or Kakra.	16	Narapahar
17	Supa	18	Kharkana
19	Doharma	20	Paparaka Damki
21	Mahapatai	22	Burseli
23	Khawaspur	24	Kaithi
25	Phaga	26	Nara
27	Bhikha	28	Geruya
29	Matabara	30	Vagha Pahari
31	Lokhna	32	Jugi Pahari
33	Mandar	34	Nari Pahar
35	Mali	36	Sukiya
37	Bhageswari	38	Sundaridol
39	Pangchpahar	40	Dhamsur
41	Ranggasar	42	Changda
43	Panchuya	44	Ghoramara
45	Chilkara	46	Mahaguri
47	Khejuriya	48	Gongdra
49	Nari	50	Baghoya
51	Gauripurer Damki.	52	Bhalki

53	Masadbeli	54	Telpataniya
55	Padampurer	56	Baraduyari
	Pahar.		
57	Chupridangga	58	Chapri
	Pahar.		
59	Pachkatiya	60	Jiruliya
61	Jhaosa	62	Siljori Pahari
63	Charkidamki	64	Tehatjor
65	Baraguniya	66	Lonkhar
67	Bhongyora	68	Lakshman Pahar
69	Gajnadi	70	Jugni
71	Dholpahari	72	Mundali
73	Gidhana	74	Kangreswari
75	Ghoradaur	76	Kangsgariya
77	Vakparbat	78	Gajariya
79	Petar pahar		

12. Division Fayezullahgunj:—

1	Bhalui	2	Murali
3	Tarotok	4	Bejam
5	Harimundi	6	Sripurer Pahar
7	Badluggunj Pahar	8	Patharghati
9	Kahalganj Pahar	10	Sangga

13. Division Paingti:—

1 Pir pahari.

14. Division Rajmahal.

1	Pir pahari	2	Pir Pahari
3	Pir pahari	4	Chhata
5	Manasachandi	6	Sita Pahari
7	Bhagalpura Pahar	8	Chauki

15. Division Phutkipur:—

1 Pir Shahwali Pahar.

16. Division Furrokhabad, no hills.

17. Division Pratapgunj, no hills.

18. Divison Aurunggabad, no hills.

19. Division Kalikapur:—

1	Molang	2	Digbai
3	Siyarbo	4	Ghati Pahar
5	Baghora	6	Govardhandhari
7	Dighal pahari	8	Buripangral
9	Bhelai	10	Simlya Pahari
11	Paldi.		

## 20. Division Lakardewani:—

1	Kuji Pahar	2	Beliya Pahari
3	Kasba Pahari	4	Bhandari Pahari
5	Jaloye	6	Karariya
7	Bhaluya Pahar	8	Khalari Pahari
9	Jugi Pahari	10	Kengduya
11	Doraya	12	Belya
13	Nagoya	14	Metiyani
15	Kamardiha	16	Jitjori or Pangrariya
17	Gidha	18	Dhadesiktiya
19	Kadarsen	20	Katani
21	Jaratal	22	Bamundiha Pahari
23	Purniya	24	Kamarchak Pahari
25	Kakrol	26	Bauriya
27	Kangjbe Pahari	28	Elach Pahari
29	Makarkanda	30	Dudhuya
31	Loti	32	Pokhariya
33	Pokhariya Chhota	34	Garoduma
35	Bangsko	36	Nandanakop
37	Burijhilwa	38	Daungduyari
39	Doman Pahari	40	Thanpur Pahari
41	Goyari Pahari	42	Chauthaur Pahar
43	Amdaha or Bon- phukar Pahar	44	Pangchar Pahar
45	Gaul Pahar	46	Meghi
47	Ghati	48	Janbe
49	Sindariya	50	Lakshmanpur Pahar
51	Karabil Pahar.		

TERRITORY OF THE SOUTHERN  
MOUNTAINEERS.

## I. Territory of Hari Singha of the Kumarpali.

1	Bhaluka Pahar	2	Gaijhorer Pahar
3	Rajbandh Pahar	4	Sundardi
5	Tarani	6	Bhawanichapar
7	Satbar		

## II. Territory of Ratna Singha of the Kumarpali.—

1	Bharangr	2	Balparai
3	Narasi Pahari	4	Dhadhiha
5	Singgarmat pahari.	6	Nakti
7	Dighir Pahar	8	Pariya

9 Pula                    10 Masaniya  
 11 Tankara.

**III. Territory of Sumer Singha of the Kumarpali :—**

1 Ranggaliya	2 Kulang
3 Dol	4 Bangsmata
5 Nakti	6 Nima
7 Rampurer Pahar	8 Resmi
9 Chaklata	10 Patan
11 Porgang	12 Bera Pahar
13 Khejurdhi	14 Ramgar
15 Arali	16 Kongarigar
17 Salbona	18 Gol
19 Jhikrya	20 Kalyanpur
21 Khali	22 Gosaing Pahar
23 Natiya Pahari	24 Nakti

**IV. Territory of Baradebu Kumar of the Kumarpali :—**

1 Kangruli	2 Sanghati
3 Danggar	4 Chilgo
5 Pakrikhuta	6 Bajri
7 Bargo	8 Bengni
9 Setbange	10 Kola
11 Isarki	12 Domalherya
13 Selanggi	14 Margaja
15 Bhelaidi	16 Kakuya
17 Selai Pahar	18 Chapa Pahar
19 Ketpoka	20 Guma Pahar
21 Goderasathaniyan Pahar.	22 Kormo
23 Bhalka	24 Selai Pahar
25 Dubrajpore.	

**V. Territory of the Chhota Debukumar of the Kumarpali :—**

1 Patpalma	2 Singarsi
3 Namagara	4 Drabio
5 Koskhuta	6 Pakardipara
7 Masnya	8 Digha

**VI. Territory of Haro Kumar of the Kumarpali :—**

1 Pirpahari	2 Siuli
3 Aulagachhi	4 Nuni
5 Purandari	6 Pok Pahari
7 Barandi	8 Danggapara

9	Gidgo	10	Jorar
11	Kerma	12	Pakardi
13	Mali pahar	14	Barpangra
15	Kutni	16	Dasagora
17	Bangs Pahari.		

## VII. Tappa Sarmi :—

1	Amra	2	Kusdi
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## VIII. Marpali :—

1	Bakoya pahar.
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## IX. Dangrpali

1	Baiskyा	2	Dhaniya Pahar
3	Beliya Pahar	4	Nidhini
5	Chaudhar	6	Barapathar
7	Daldali pahar.	8	Namuri
9	Kasai.		

## TERRITORY OF THE NORTHERN MOUNTAINEERS.

## II. Tappa Majhuya :—

1	Bandarkola	2	Dalavari
3	Dimura	4	Khota
5	Garera	6	Dhobni
7	Metiya khord	8	Metiya Bara
9	Bhongraghati	10	Dumur Pahar
11	Dumarbhita	12	Dewanchak
13	Dhanmare	14	Piparbarge
15	Gorai	16	Banga Pahar
17	Kongmari	18	Lakhmi
19	Gumarkota	20	Orgari
21	Chandoyasi	22	Padam pahari
23	Pachar	24	Gamari
25	Bathani	26	Kodban
27	Kulman.		

## III. Tappa Manihari :—

1	Padan pahari	2	Garapani
3	Dhamaniya	4	Parasiya
5	Bangang	6	Pathar Chipti
7	Sobra	8	Kurutika
9	Bhandagora	10	Bangskitok
11	Boyarijor	12	Churi
13	Jhaponi	14	Jolo

15	Murchira	16	Orbat
17	Kurro	18	Jani
19	Depahari	20	Kharagdani
21	Puriyabadar	22	Sandariya
23	Baratari	24	Garirangoya
25	Kerlo	26	Dhobuaro
27	Dhagora	28	Gargari
29	Mari	30	Baskitok
31	Dhusari	32	Dhagora
33	Chukla	34	Kukurdangre
35	Rupatok	36	Tuko
37	Bangsko	38	Kamadari
39	Bangskota	40	Dhaodangr
41	Saheba	42	Kheriya
43	Garapani	44	Amra khord
45	Dapani	46	Teturiya
47	Tamlitok	48	Amra
49	Adro	50	Gelemari
51	Lhongra	52	Uljar
53	Tarola	54	Poririya
55	Dhuriyari	56	Chehar Pahar
57	Pipra	58	Dhaogora
59	Jokani	60	Langgarbhita
61	Chatra	62	Gorkalla
63	Chuka	64	Amsahari
65	Kharikhan	66	Cheyar Pahari

IV. Tappa Madhuban:—

1	Ajadhay	2	Baltok
3	Banchampa	4	Guhtti Bera
5	Bhatha	6	Lohar Bera
7	Sundar	8	Gelemari
9	Bichhkani	10	Murali
11	Dhamal bhitta	12	Ghutti Bera
13	Sodha	14	Chatram
15	Balbhadra	16	Bamuniya
17	Simriyatok	18	Medni
19	Amdangr	20	Kolbhangga
21	Tetrika	22	Pakariya
23	Jaguri	24	Kotgandi
25	Kharakkhuti	26	Chuyelala
27	Mandarama	28	Suyarmari

29	Raksi	30	Damdama
31	Sidhari.		

## V. Pergunah Garhi:—

1	Mirapara	2	Pangbo
3	Tetuliya	4	Adro
5	Lohara	6	Ghogi
7	Lohara	8	Naygichi
9	Pachgar	10	Chhota Pachgar
11	Nodhni	12	Doram
13	Pukriya	14	Karam
15	Kani	16	Pukriya
17	Betla	18	Depari
19	Dulehe	20	Porepara
21	Palamba	22	Chaldehi
23	Sarkar	24	Pangchruki
25	Kulbhingga	26	Dengba
27	Marikuti	28	Suiriya
29	Bhurkundi	30	Pukriya
31	Janibhita	32	Chuelala
33	Teliyagarhi		

## VI. Tappa Yamuni :—

1	Bhoga	2	Chhota Bhoga
3	Ramvati	4	Dumuri
5	Bhutri	6	Darbao
7	Pashur bhita	8	Kari
9	Roro	10	Mandi
11	Kachari	12	Gila
13	Boran	14	Chatki
15	Jhapni	16	Bhiti
17	Dangga	18	Bahera
19	Chhota Chaungdi	20	Talgachihi
21	Chhota	22	Bara Chaungdi
	Tetalgachhi		
23	Tetalgachhi	24	Bajhi
25	Mandai	26	Thuthi
27	Sasra	28	Dhatikari
29	Gabebhita	30	Jhinggani
31	Depahari	32	Champa
33	Nayagang	34	Mirapara
35	Kharkaniya or	36	Dewari
	Kharkharaya.		

## HILLS IN BHAGALPUR

37	Darkalla	38	Gaduya
39	Chengro	40	Kerobera
41	Chaphal		

## VII. Tappa Chithaliya :—

1	Bangs paphar	2	Gidhar
3	Chabi	4	Kharwa
5	Rora	6	Dhawala
7	Chuya	8	Banapara
9	Kherotok	10	Uchanasi
11	Solmon	12	Barabathani
13	Salgachhi	14	Bangsgo
15	Nang garbhita	16	Gorbhangga
17	Hardi	18	Bathani
19	Dhamdhami	20	Danggatok
21	Bhoga	22	Bangriya
23	Kari	24	Pupan
25	Mayachak	26	Kajitok
27	Dhobghati	28	Padam Pahari
29	Pharadtok	30	Jokani
31	Kuchlo	32	Bangs Pahar
33	Dhagora	34	Phuta Pahar
35	Panak	36	Sajni
37	Chaughariya	38	Goyali
32	Tilabhita	40	Tila Pahar
41	Ghutibera	42	Bhursi
43	Newa	44	Amtala
45	Chaungdi	46	Amghattu
47	Jhirukdangga	48	Pagar
49	Bagicha	50	Mathabhangga
51	Hariya	52	Balks
53	Bheloyatok	54	Bhatbhangga
55	Bangs pahar.		

## Tappa Kangjiyala.

## VIII. Turuf Rupa :—

1	Ganggapara	2	Nimaitok
3	Makka	4	Gadabhita
5	Bhoraghati	6	Kaseri
7	Chhota Chora- ghati.	8	Chandala
9	Khariyagar	10	Banapara
11	Chhota banapara	12	Hariyakol

13	Goddatola	14	Godaitunggi
15	Manaitok	16	Patharchipti
17	Amdanda	18	Teghara
19	Udsa	20	Chil pahari

## IX. Turuf Sakra :—

1	Barakurum- ghati.	2	Tilabhita
3	Kangrobangsa	4	Chhota Kurum Ghati
5	Nirbhita	6	Chukli
7	Bangs pahar	8	Dumurbhita
9	Padambhita	10	Rajapani
11	Dhanbhita	12	Berokep
13	Cheyar pahari or Baram.	14	Malbhita
15	Karamtok	16	Patharchipti
17	Chandragora	18	Daldali
19	Bhadragora	20	Karangga
21	Dorahi	22	Nagari
23	Pachkol	24	Bichhkani
25	Borna	26	Chama

## X. Mawas :—

1	Guma	2	Kischapri
3	Dahari	4	Nakra

Perganah Ambar.

## XI. Turuf Khepa :—

1	Kamagara	2	Malipangra
3	Chhotapoktuti	4	Barapoktuti
5	Ejkaja	6	Kirokuriya
7	Masdari	8	Maspangra
9	Chapa	10	Ejagoja
11	Kungjabani	12	Kasirpara
13	Danggarpara	14	Madgipara
15	Dhukurikajo	16	Chargar
17	Suryabera	18	Danggarkata
19	Kachnapara	20	Amrubhitta
21	Malipara	22	Tisakuriya
23	Sidhaghati or Poram.	24	Naoda
25	Gamartangri	26	Kumarmajha
27	Baramasiya	28	Dudumara

29	Karadani	30	Nurga
31	Dario	32	Khami
33	Charka	34	Nata pahar
35	Hatkata	36	Sundarpur
37	Chinipara	38	Gangruprata
39	Jitarpur	40	Chatro
41	Mechi	42	Dhaniyamara
43	Pukhariya	44	Amakura
45	Dhanghara	46	Phulchuya
47	Silkuta	48	Dharun

**XII. Mawas:—**

1	Kalidaspur pahar.	2	Chandanmau
3	Ghagarjan	4	Bel pahari
5	Talpahari	6	Tetulya

**XIII. Turuf Singga:—**

1	Pupa	2	Margo
3	Chandikona	4	Patora
5	Kisabhita	6	Soladoni
7	Kukurma	8	Amarkutiya
9	Dudigara	10	Leti
11	Berodangdei	12	Dangrkuriya.
13	Pashurbhita	14	Pangrgo.
15	Chakdam	16	Tetulya.
17	Singlam	18	Tatarbhita.
19	Kumarkot	20	Garsobhita.
21	Madhikuta	22	Payer.
23	Bij pahari	24	Ura.
25	Karkarma	26	Raksa.

**XIV. Tappa Payer.**

1	Karamtok	2	Guddam.
3	Muri	4	Tar pahar.
5	Mukma	6	Gujra.
7	Kamabhatta	8	Garai.
9	Kotruki	10	Chala pahar.
11	Mahebar	12	Siuriya.
13	Tokjari	14	Makama.
15	Bangs pahar	16	Ghoga.
17	Pusar pahar	18	Merka.
19	Udani	20	Tamli
21	Jari Khord	22	Kaldibhatta.

23	Kotrama	24	Kamchi.
25	Moter Kalang	26	Bandarkola.
27	Katan pahar	28	Bandarkola-khord.
29	Karamtok	30	Jari-Kalang,
31	Tat para.	32	Murgo.

## XV. Tappa Mawas.

1	Jamali-Kalang	2	Kekto.
3	Dhao pahar	4	Dhobar.
5	Ambar	6	Dadda.
7	Tetalgora	8	Dhaogora.
9	Kathan Pahar	10	Tamli.
11	Jamali-khord	12	Kanadi.
13	Kandu	14	Korgo.
15	Chatma	16	Pandel.
17	Kharag pahar	18	Bal pahar.
19	Karjo	20	Padan.
21	Madgi	22	Koya.
23	Dhaogora	24	Jhar pahar.
25	Gita.		

## XVI. Tappa Parsanda.

1	Malbhitta	2	Tatakgora.
3	Tolamalbhitta	4	Teturiya.
5	Baskibara	6	Kesiama.
7	Katan pahar	8	Erarohar.
9	Tamligora	10	Kerto.
11	Kerlo Khord	12	Madgigora.
13	Dhengga	14	Kerogora.
15	Dhobgari	16	Ghogha.
17	Gamari	18	Dholna.
19	Gariya	20	Dheriyatok.
21	Elkar	22	Jagori.
23	Kherbahiya	24	Chacham
25	Bargo	26	Dhaonigora
27	Kamagora	28	Barna.
29	Chapari	30	Elkarbhitta.
31	Chaprava	32	Moter.
33	Domgora	34	Phera.
35	Domar pahar	36	Baski.
37	Ghoga.	38	Kasarigora
39	Dumur pahar	40	Dhagora.
41	Chuyelala	42	Marar.

43	Barari	44	Dabra.
45	Kusumghati	46	Simbhi.
47	Ornam		

## XVII. Tappa Barkop:—

1	Puro	2	Kus Pahar
3	Patma-khord	4	Kelobar
5	Karamtok	6	Elkar
7	Elkarkuriya	8	Paskurkuriya
9	Payerkuriya	10	Kambhitta
11	Barbo	12	Chatma
13	Netratola	14	Kandar
15	Khejari	16	Joyonetola
17	Telarghuchi	18	Palma
19	Tokkuriya	20	Doyoni gora
21	Mattubera	22	Patmabar
23	Merchai	24	Tesrotola
25	Tukam	26	Kalakbhitta tola
27	Chala pahar.	28	Daonigora
29	Baher	30	Dumuriya
31	Jhuli	32	Keto-khord
33	Melko	34	Pukhariya
35	Dodri	36	Orjari

## XVIII. Tappa Dhamsaing:—

1	Tokkuriya	2	Khorakuriya
3	Barmadgi	4	Makama
5	Tetmakuriya	6	Bairago-kalang
7	Telbhitta	8	Charmaka
9	Jhirakkuriya	10	Bangs pahar
11	Ghoga	12	Katanpahar
13	Roro	14	Dhoogora
15	Tamligora	16	Elkar
17	Pashurkuriya	18	Phupda
19	Damar pahar	20	Madgi
21	Garrama	22	Khejuri
23	Tokkuriya	24	Kerokuriya

## XIX. Tappa Yamuni harnapar:—

1	Chaparbhitta	2	Kerokuriya
3	Tilo	4	Champa
5	Chal pahari	6	Sana pahar
7	Jhikurkuriya.	8	Tatakgora
9	Palang	10	Bangski-khord

11	Ghoga	12	Ambar
13	Pukhariya	14	Tila
15	Karamtok	16	Dumarkuriya
17	Adro	18	Katan pahar
19	Magalan	20	Katan
21	Gochhmara	22	Kamagora
23	Damarpahar	24	Dhagora
25	Kerokuriya	26	Chuelala
27	Pashurkuriya	28	Jamokuriya
29	Siddhi Kuriya	30	Kerokuriya
31	Tamli	32	Kanadikuriya
33	Churi	34	Elkar
35	Suja	36	Dumar Kuriya
37	Paker	38	Tetnagora
39	Dhagora	40	Elkarkuriya
41	Chachan or Chamari.	42	Tamali
43	Khejari.		

## XX. Sumarpali:—

1	Paktangri	2	Dumunibhitta
3	Chachar	4	Chhotapaktongri
5	Payertangri	6	Bairagokalang
7	Adrapara or Jolo	8	Tatakbhitta
9	Teturiya	10	Nadopara
11	Pashurkuriya	12	Tatakpara
13	Bangspahar	14	Malikundi
15	Sazanggi	16	Medni.
17	Sabe kundi.	18	Ghuttipara.
19	Kangseripara.	20	Bairago-khord
21	Dangdo		

## Hills scattered through Fayezullahgunj and Paingti:—

1	Akanpur	{ to Madhuban.
2	Sitalpur	
3	Chandipur	
4	Harin kol	
5	Paingti or Bharonda	
6	Bargang	{ to Manihari.
7	Bhader	
8	Maha pahari	
9	Khota	{ to Garhi.